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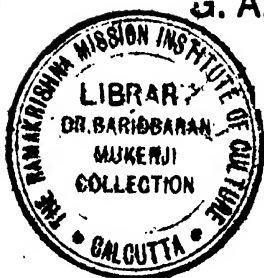
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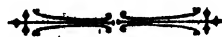
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The Seventeenth Indian National Congress.



It is a striking testimony to the intrinsic merits of the Congress movement that, in the teeth of the opposition of several high-placed officials and the systematic misrepresentation of its aims and objects at the hands of a section of the Anglo-Indian press, and despite the various trials it has gone through, the Indian National Congress should have been able to hold seventeen annual sessions, and that the meetings held at Beadon Square, Calcutta, in the last week of December, should have been marked by the same spirit of enthusiasm as ever. According to all accounts the last Congress was a success from every point of view. The attendance was large as usual and the proceedings were characterised by the same spirit of loyalty and moderation which has always been their chief feature. As the *Statesman and Friend of India*, the well-known leading Anglo-Indian daily newspaper of Calcutta in the course of a just and sympathetic article on the recent Congress rightly points out, "it is sheer want of sympathy with the aspirations of an educated and progressive community, and that alone, which can see in the Indian National Congress anything to justify suspicion of the single-mindedness of the aims which pervade the movement." The same paper goes on to observe: "None of us really wish to see the people of this great empire dead to the honourable desires and ambitions which characterise a healthy national life in all lands. It is unworthy of us, as Englishmen, to view with any feeling but that of gratified pride, the symptoms of a true national life arising amongst the people, and we are sometimes tempted to ask ourselves what has been our real purpose in the establishment and consolidation of peaceful rule in the country, but the attainment of this very end."

This observation sums up the true attitude which all honest Englishmen should adopt towards the movement, and it is the very attitude which

the Indian public demands of the rulers. It is now nearly sixty years since Macaulay observed:—

"It may be that the public mind of India may expand under our system till it has outgrown that system; that by good government we may educate our subjects into a capacity for better government; that having become instructed in European knowledge, they may, in some future, demand European institutions. Whether such a day will come I know not. But never will I attempt to avert or to retard it. Whenever it comes, it will be the proudest day in English history. To have found a great people sunk in the lowest depths of slavery and superstition, to have so ruled them as to have made them desirous and capable of all the privileges of citizens, would, indeed, be a title to glory all our own. The sceptre may pass away from us. Unforeseen accidents may derange our most profound schemes of policy. Victory may be inconstant to our arms. But there are triumphs which are followed by no reverses. There is an empire exempt from all natural causes of decay. Those triumphs are the pacific triumphs of reason over barbarism; that empire is the imperishable empire of our arts and our morals, our literature and our laws."

We do not believe, indeed it would be a calumny to say so, that any educated Indian would be so debased and ungrateful as to wish for India's separation from England, and we shall never perhaps have need for realising Macaulay's dream. But nevertheless we may be permitted to observe it is sentiments like those of Macaulay and the *Statesman and Friend of India* which ought to inspire all Englishmen who are in any way directly or indirectly responsible for the good government of India. England has promised to govern India on principles of righteousness and to allow the sons of the soil to have a due share in the administration of the country. The Congress movement which echoes the opinion of all thinking men in the land does nothing more than ask for the fulfilment of England's pledges and promises to India, and the only right and proper way to deal with it is to show a generous sympathy and not heap on its promoters and workers, reproaches and calumnies altogether unjust and undeserved.

Mr. Wacha's Presidential Address.

We have nothing but praise for the exceedingly interesting address which Mr. Dinshaw Edulji Wacha delivered from his presidential chair. Those that complain of its length must not forget the fact that unlike other Indian politicians Mr. Wacha has made the economic and material condition of India his life-study. He is a reputed student of Indian finance and he has a thorough command of facts and figures bearing on the subject. If any one had expected a short and sweet oration from him the fault lies with him and not with Mr. Wacha. During the past year, the seriousness of the economic situation in India had been more than ever prominently before the public and a series of disastrous famines opened the eyes of the authorities to the gravity of the situation. We have had a Famine Commission and an Agricultural Banks Commission and they have both presented their reports. The Irrigation Commission and the Industrial Commission are now holding their sittings and their deliberations are not yet finished. It is quite in keeping with the function of a Congress-President that Mr. Wacha should have dwelt at length on all these important topics. His observations on all these questions of the hour bear testimony to his clear grasp of the situation. Famine which has become a chronic factor naturally occupies a good deal of space.

Referring to the recent famine, Mr. Wacha dwelt upon its terrible nature and the length of time that must elapse before its effects upon the peasantry would pass away. He said that the Government had done no more than its duty in spending the revenue on famine relief, but the spirit of humanity which had prompted so large an expenditure was, he said, beyond all praise. He went on to discuss the patience and endurance of the sufferers and their gratitude for what had been done for them, and remarked that since the assumption of his high office,

Lord Curzon had succeeded in infusing into the officials not a little of his own spirit of watchfulness, solicitude, sympathy and, above all, of speedy action on behalf of the famine-stricken. He also animadverted on the famine policy of the Bombay Government, but expressed the hope that if the many practical recommendations of the Famine Commission were carried out in the spirit in which they were made, a wholesome change in the condition of the impoverished peasantry might be slowly effected. He protested against a too rigid revenue law and condemned the cast-iron system of the Land Revenue which the British administration had introduced. He urged that the State-demand for enhanced assessments was at least partially responsible for the universally noticed reduction in the staying power of the masses, and that an exhaustive enquiry into the matter should be held, as had been advocated by the Indian Famine Union.

In his recent Financial Statement in the House of Commons, Lord George Hamilton gave a very optimistic view of the condition of the people of India and our Viceroy Lord Curzon sang the same roseate song in his turn. His Excellency has stated that both the agricultural and non-agricultural income of India has increased during the past twenty years. Mr. Wacha disputes this assertion of the Viceroy and he makes out indeed a strong case for the appointment of a commission to arrive at the truth.

The other points touched upon in Mr. Wacha's address refer to the question of irrigation *vs.* railways, agricultural banks, industrial education, and the retrenchment of civil and military expenditure. On all these he has said much that is useful and we would ask all who are interested in the study of the economic condition of India not to be dismayed by the length of his address but profit by a close and careful study of the various points raised in it.

Justice Chandavarkar on Social Reform.

The proceedings of the Indian National Social Conference which held its sittings at Calcutta in the last week of December, at the close of the Congress session, once again recall to our mind the loss which the nation has sustained in the passing away of the master-mind which guided its destinies for a period of over twelve years. From its commencement the Social Conference has had a great deal of rough sailing in troubled waters, and if at the present day it has come to be recognised as an inevitable factor in the onward march of our people, the credit of it is due not a little to the distinguished Mahratta Brahmin who steered it clear and brought it to safe harbour. Year after year, the delegates and other visitors to the conference were treated by the late Mr. Justice Ranade to an inaugural address which testified to the power of his gigantic and versatile intellect, his broad heart, his intimate knowledge of human nature and his extremely charitable spirit. He was fully alive to the serious nature of the task that lay before him and the difficulties that had to be encountered. His utterances on the subject of social reform have—thanks to the public spirit and enterprise of a young Madrassee—been collected together in a handy volume* and we would recommend to all workers in the field a careful study of them. Indeed, after perusing the speech of the Hon. Mr. Justice Chandavarkar at the recent social conference, we feel his loss all the more keenly. Justice Chandavarkar's speech is quite in contrast with Mr. Ranade's utterances on previous occasions. The chief merit of Mr. Ranade was that when he criticised the evil effects of our social institutions, he did so in language which was at once inoffensive and graceful. Nor is it possible to trace in his many discourses, any platitudes or senti-

mental appeals to human feeling and passion. Mr. Ranade distinctly recognised the existence in society of "the power of long-formed habits and tendencies" to use one of his own expressions. We sadly miss in the latest pronouncement of Mr. Chandavarkar the suavity and sweet reasonableness that characterised the utterances of Mr. Ranade. As usual, one of the resolutions of the last Social Conference related to the re-marriage of child-widows. It is a well-conceived resolution and we think it a great pity that it should have encountered strenuous opposition. Anyhow there seems to have been a feeling against it. It was ultimately carried and Mr. Justice Chandavarkar at the conclusion of the proceedings referred to this opposition and said:—"I saw a Bengali gentleman sitting right in front of me, facing the platform and he seemed to lead the opposition. I do not see that gentleman now in his place but if he is not here, I hope my words will reach him somehow and he will, when he retires into the bosom of his family, examine himself a little and then he will find how guilty of inhumanity those become, who oppose the marriage of a child-widow." We must confess that such language lacking as it does in balance and sobriety is open to grave objection. It would perhaps be excusable if it proceeded from a young reformer with more zeal than discretion. Emanating, as it does, from the lips of a responsible leader like Mr. Justice Chandavarkar, it is calculated to injure the cause. Does Mr. Chandavarkar mean seriously to suggest for a moment that all those who oppose the re-marriage of child-widows are devoid of sentiments of humanity? Can he not conceive of people who have genuine objections to it but who are none the less humane and tender-hearted? One can understand a critic pitying the misguided opposition of such men, but it seems to us to be nothing but uncharitable to attribute to them unworthy motives and characterise them as inhuman. Surely the progress of social reform cannot

* Indian Social Reform—in four parts, being a collection of essays, addresses, and speeches, edited by Mr. C. Y. Chintamani, Price Rs. 3-8.

be hastened by such aggressive talk. The mantle of the late Justice Ranade has fallen on the shoulders of Mr. Justice Chandavarkar, and it is but fitting and proper that he should walk in his footsteps. Let all reformers bear in mind the following exhortation of the late Mr. Ranade which indicates the true spirit which ought to inspire every worker in the field of reform.

"The process of growth is always slow, where it has to be a sure growth. The best natures naturally want to shorten this long process in their desire to achieve the work of a century in a decade. This temptation has to be resisted, and in this respect the teachings of the evolution doctrine have great force, because they teach that growth is structural and organic, and must take slow effect in all parts of the organism, and cannot neglect any, and favour the rest. There are those amongst us who think that, in this connection, the work of the reformer is confined only to a brave resolve to break with the past, and do what our individual reason suggests as proper and fit. The power of long-formed habits and tendencies is however ignored in this view of the matter. "The true reformer has not to write upon a clean slate. His work is more often to complete the half-written sentence. He has to produce the ideal out of the actual, and by the help of the actual." We have one continuous stream of life flowing past us, and "we must accept as valid the acts which were noted in the past, and on the principles of the past," and seek to turn the stream with a gentle bend here, and a gentle bend there, to fructify the land; we cannot afford to dam it up altogether, or force it into a new channel. It is this circumstance which constitutes the moral interest of the struggle, and the advice so frequently given—that we have only to shake our bonds free and they will fall off themselves,—is one which matured and larger experience seldom supports. We cannot break with the past altogether; with our past we should not break altogether, for it is a rich inheritance, and we have no reason to be ashamed of it. The society to which we belong has shown wonderful elasticity in the past, and there is no reason for apprehending that it has ceased to be tractable and patient and persistent in action. While respecting the past, we must ever seek to correct the parasitical growths that have encrusted it, and sucked the life out of it. This is, at least, the spirit in which the societies and associations which are represented at the Social Conference seek to work."

The Madras Educational Conference.

The Conference which held its sittings in the city on the 20th of last month was a somewhat tame affair. It is a matter for regret that the number of teachers who attended should have been so poor. Either it must be that those engaged in teaching work in the Presidency are resting under a complacent satisfaction that everything goes on well with them and their pupils, or that the subjects chosen for discussion were such as not to call for much debate. A Conference like this could do great good and it is to be hoped that future gatherings will be more largely attended. His Excellency Lord Amphill opened the session in a short speech and in a somewhat cautious tone declared that "the problems of education are far too big to be grasped in a few weeks or months, and they are too important to be dealt with in an off-hand manner and without a due sense of responsibility." In the morning three papers of importance were read and discussed. Mr. A. A. Hall, Principal of the Teachers' College, in the course of a paper on "The Training of Teachers" made a vigorous appeal for improving the condition of primary school-masters who occupy positions "much inferior to those occupied by the Pariah servants in a household." Lord Amphill was present when this paper was read and discussed. May we hope that His Excellency would do something to remedy the present discreditable state of affairs? Miss Carr, Inspectress of Girls' Schools, treated the Conference to a well-thought out paper on "Current criticism of the education given in our Girls' schools." This was followed by a paper on "Panchama education" by the Rev. W. Goudi. In the afternoon Mr. Glyn Barlow gave a somewhat humorous criticism on "The place of the Text-Book in Teaching." A paper of much practical interest and of general importance was the one read by Mr. Alfred Chatterton of the Madras School of Arts on the question of Industrial Education which we notice elsewhere.

Industrial Education.

Mr. Chatterton has had considerable practical experience and his observations are certainly valuable. He is in favour of the establishment of three kinds of industrial schools. The first class will comprise schools established for giving a training as artisans to boys who are not artisans by caste, and who consequently have no opportunity for the picking up of a trade in any other way. The bulk of these schools will be of a sectarian character, and will follow along established lines, and, if efficiently conducted, will afford a sort of stimulus to art and industry, by introducing a beneficial element of competition.

The second class will contain Central Industrial Schools primarily intended for the benefit of the recognised industrial classes and working with the object of improving the industries of the country. They will provide a supplementary course of instruction to the training which artisans now receive in their own homes.

The third class will consist of schools which will practically be offshoots of the second. These schools will not teach what is already taught in the bazaars, but keep in view the especial requirements of the places where industrial knowledge and skill in certain trades is in a backward condition. Endeavour will be made to teach artisans to work on the most advantageous lines and to make the most of their cheap labour. They will be managed by those who have received an especial training in the Central Industrial Schools. These men will be mostly Science graduates of our Universities or the passed pupils of the Higher Technical Colleges and Schools.

Mr. Chatterton's suggestions so far as they go, are valuable and we agree with him in the main, but our complaint is that his proposals deal solely with the improvement of fine arts and handicrafts.

With regard to the fine arts it must be remembered that though they are beautiful they are

not useful and necessary; they are the luxuries of the rich and the worker in any fine art must find his customer only among those who have a superfluity of wealth. It is rarely that working in the field of the fine arts adds materially to the wealth of a people. A great effort is now being made towards the improvement of hand-loom weaving and other similar handicrafts. It seems to be forgotten that the hand of man could only turn out a limited quantity of articles, whereas an enormous number could be turned out by machinery. The customer wants cheap goods, no matter whether they are made in Manchester or Siberia and whether they are machine-made or hand-made. The colossal industrial expansion of England, Germany and the United States and the vast accumulations of wealth made by those countries have been rendered possible not merely by using the hand of man but by the employment of machinery capable of performing the varied and complex processes required in manufacture and industry of all kinds and by the extensive application of extra human power and modern scientific knowledge in the working of such machinery. Yet, in India, this first lesson of the industrial revolution of the world is ignored, and we are told that the salvation of India is to be attained by improving the indigenous manual industries, advancing the skill of the workmen in decorative arts, in metal work, in making furniture, and in weaving cloth by the hand.

Mr. Chatterton appears to think that much could not be done in Southern India to create or maintain industries for want of raw material. It does not seem an absolute necessity that raw material should be produced in the country in which the industry should be maintained. As a striking instance we may point out that England does not produce one cotton plant, but the bulk of its exports are cotton piecegoods worked out of raw materials imported from elsewhere. Another example might be found in Japan. This country imports all its raw cotton required for its manufac-

tures from India and other countries. Even assuming that raw materials are a necessity, we may point out that Madras possesses articles which have not yet been manipulated. A very large number of hides and skins are exported from Madras to America whose trade in boots and shoes has become enormous in recent years. The largest item of exports from Madras is in hides and skins, to the value of 273 lakhs. May we ask, if Americans could take these to their country and send them to the world in the shape of boots and shoes, could it not be done in Madras itself? Boot and shoe-making is "one of the most mechanical industries in the world" and almost the whole of the process is done by machinery. In 1898-99 we exported coffee to the value of 173 lakhs.

Why should not the same be exported in powder in the manner that Messrs. Stanes & Co., have just begun to do? We exported 130 lakhs of raw cotton. Why should it not be ascertained what is being done elsewhere and manipulate the article in Madras itself? We exported seeds to the value of 40 lakhs, most of which were oil seeds. Why not convert them into oil? We exported oil to the extent of 30 lakhs. Why not utilize it for making soap, &c., here, for which purpose it is used in France? No trade has yet sprung up in utilizing the very large quantities of plantains, bananas, &c., simply owing to the fact that no one knows how to preserve them for long voyages. We mention these articles specially because Mr. Chatterton says that there are no raw materials. It is not so much the want of raw material as the want of knowledge of processes for working up the existing materials that is the most crying need, and it is to supplying this kind of knowledge that the endeavours of all should be directed. In countries like Japan, Hungary, the United States, Afghanistan, the Governments have greatly aided the promotion of industries by subsidies and other facilities, and wherever necessary they have afforded protection to the new industries. Something must be done like

that which has been done by the Madras Government in the promotion of the aluminium industry. It ought not to be too much to expect even a foreign Government like ours to do much, for our foreign Government really is not like other Governments known to history, and indeed loudly professes to be different in character. We have a right to expect Government to provide facilities for learning industries. There is a false notion prevalent in many quarters that the Government is already spending too much on higher education. As a matter of fact the expenditure on higher education in India is nothing compared with the vast sums spent by other Governments. The Government is maintaining arts colleges where there are professors of literature, mathematics, history, philosophy, science and biology. We contend that it should also maintain chairs of technology, bacteriology and other sciences requisite for manufacturing purposes in the professional colleges maintained by Government. Suppose Mr. Chatterton were to leave the School of Arts, who is to look after the aluminium industry, and the new improved loom? Educated young Indians, having the requisite training and knowledge, must be ready to take up the place. At present we have none, because we have no institution in India where they can learn it. Our contention is that a technological institution ought to be established. To those that cry off these suggestions on account of their expenditure, we would quote the following passage from Prof. Huxley:—

"Whatever that might cost depend upon it the investment would be a good one. I weigh my words when I say that if the nation could purchase a potential Watt, or Davy, or Faraday at the cost of a hundred thousand pounds down, he would be dirt-cheap at the money. It is a mere commonplace and everyday piece of knowledge, that what these three men did has produced untold millions of wealth in the narrowest economical sense of the word."

The Industrial Exhibition at Calcutta.

It is impossible to overestimate the value of exhibitions in the industrial development of a country. In England, owing to the exertions of the late Prince Consort, the first exhibition of the kind was held in 1851. According to Sir Philip Magnus "it afforded for the first time an opportunity of comparing the products of our shops and mills with those of other countries, and showed in strong relief the bearing of art on manufactures, and the possibilities of improvements which might follow from the alliance of industry with science. It was a great object-lesson from which we have never ceased to profit." Perhaps many are not aware that it was the 'World's Fair' at Philadelphia in 1876 which awakened Germany to the importance of industrial, as distinct from technical, education. The German Commissioner, Reuleaux, telegraphed to Prince Bismarck that our "goods are cheap but wretched." Bismarck immediately instituted inquiries into the causes of the industrial inferiority of Germany. The defects were remedied, and as a result, the present German industrial growth has become an object of envy. We sincerely hope that the industrial exhibition recently held at Calcutta in connection with the Congress will be productive of great good. The "Lawyer Congressman" has come in for a great deal of abuse. It is a striking fact that among the most prominent members of the Congress who have been devoting a considerable portion of their time and talents to the problem of the industrial development of the country are two young barristers. Mr. J. Chaudry, of Calcutta, has been described to be the life and soul of the recent industrial exhibition in that city and the success of the show is due not a little to his untiring zeal and devotion. We may also mention the name of Mr. Rashi Kishen Lal, of Punjab, to whom is ascribed the credit of bringing up the industrial question prominently before the Congress.

The Mussalman Awakening.

The recent educational activities of the Mussalman community will be hailed with delight by all classes and by the Hindus in particular. For, like the Hindus, the followers of Islam have had a glorious past. They have had their prophets, their philosophers, their statesmen and scholars versed in literature and science. But unfortunately owing to short-sighted conservatism they did not take advantage of the facilities afforded to them by the British Government for bettering their condition. The result has been that while the Hindus have taken advantage of the new light and learning and thus equipped themselves for a share in the Government of the country, the Mussalmans have lagged behind and have proved in way a clog on the wheel of the general progress of the land. It is therefore gratifying to see this ancient and historic community awakening from its torpor. The proceedings of the Muhammadan Educational Conference which recently held its sittings here were characterised by considerable earnestness of purpose and a genuine desire to improve their present condition. In the Hon. Mr. Justice Boddam, the Conference had a President who gave much friendly advice. He emphasized once again the value of self-help. As a thoughtful Muhammadan, Mr. M. N. Hydari M.A., not long ago observed :—

"Our first and pre-eminent need is an entire change of attitude, mental and moral, in the solution of the great problem of our advancement. Self-help, self-reliance and self-respect must be the watch-words of our future-action."

We would also suggest that the leaders of the Muhammadan community should take care that they do not allow themselves to be used as convenient tools for interested people to achieve their object. Let us remember the message of peace which the late Mr. Justice Ranade preached two years ago at Lucknow:—

"Every effort on the part of either Hindus or Mahomedans to regard their interests as separated and distinct, and every attempt made by the two communities to create separate schools and interests among themselves and not to heal up the wounds inflicted by mutual hatred of caste and creed, must be deprecated on all hands."

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THE EXECUTIVE AND JUDICIARY IN INDIA.

HERE can be no doubt that public policy requires a definite and proper state of relations between the Indian Government and the Judges of that Empire. Probably the best equipoise is attained, when the Government and the High Court habitually shew mutual respect, by leaving each other alone in their peculiar functions. This view of things was stated by Sir Matthew Sausse, C.J. on the establishment of the Bombay High Court, and has usually commended itself to the powers that be. Conflicts of authority are now of rare occurrence. At times, however, some blunderer or busy-body oversteps the dividing line, wounding personal feeling or trespassing on jurisdiction, so that heart-burnings and jealousies begin. The pen of the ready writer, wanton or indiscreet in the use of adjectives, has sometimes led to mischief. I remember the wrath of the Judges of Fort William, at the sarcasms which a Secretary was allowed to make and publish, on the learned and cautious opinions about some great changes proposed in land-tenures, with which they had favoured the Council. Some years ago Mr. K. C. Bedarkar, who has since risen to the important place of Chief Karbhari at Indur, was Judge of the Poona Court of Small Causes. The Bombay Government having sent a letter, containing four angry adjectives, of complaint against one of his decisions, the High Court Judges met to consider it. After their refusal to interfere, the case came up in the usual course, and the high tribunal declared that the learned Judge had applied the law rightly. I remember also how a District Judge once demanded that the local Government should cancel a resolution, containing an insinuation, quite unfounded, that he had disposed of the easier sort of appeals out of their turn in order to make a misleading show of diligence in his monthly return of work. Untoward incidents like these rankle in men's minds: they

conflict with the policy whereby one authority upholds another, and are opposed to the well-known presumption that officials' duties are duly performed. That these things ought to be avoided is plain to common sense, and that they can often be avoided is clear to me after a long Indian experience, not only in high controlling judicial offices, but also as a responsible adviser of Governments, which double fact will perhaps enable me to treat the subject in a more impartial spirit than those occasional writers, who have had neither of these opportunities of insight.

The fault has sometimes been on one side, sometimes on the other. Judges have occasionally shewn themselves too sensitive and delicate and required their acts and character to be treated with an exquisite, indeed a religious respect, as James Mill sneeringly remarks in the part of his history which relates the abuses arising from the Supreme Court in Bengal in 1780 when Warren Hastings was Governor and Impey was Chief Justice. The fearful quarrels of that olden time, with its vague jurisdictions and strange procedures, afford no special lessons for the present day. A reflexion of them occurred in Bombay in 1829 in the case of Moro Ragonath, for the bringing of whom from Poona, the Judges of the Supreme Court issued the writ of *habeas corpus*. The Government of Sir John Malcolm refusing to let the process be executed, the surviving judge, Sir John Peter Grant, closed the Court. On the question of jurisdiction the Privy Council upheld the Government. The judges seem to me to have been too touchy in the smaller matter of a letter signed by the Governor and his colleagues, evidently meant as a respectful form of statement of their views, with a wish to avoid a collision; quite different to a letter to influence the court for or against any particular person, which has been held to be improper in form, as the government ought to instruct its counsel to move in open Court. It must however be borne in mind that the King's

judges of that time were sent out avowedly to control the East India Company's servants, whence arose a good deal of jealousy. The opposite mistake made by a recorder, some years before, of deferring to the supposed policy of the local governing body, had led to chronic injustice and overbearing oppression in the island of Bombay. A different sort of acquiescence in the wishes of Government on the part of the Company's Judges of the Sudder Adawlut must have told powerfully in aid of justice in some of those Native States, where the British Government kept political officers to try judicial cases. The Sudder Judges, though bound by no law so to do, let themselves become an advisory sort of Privy Council in the matter of appeals which they solemnly decided. When the High Court was established, it declined to continue this volunteer assistance, as it had no duty nor jurisdiction; and at the desire of the Chief Justice, the Political Secretary to Government came and carried away the records. See *QE v SARYA*, I. L. R. 15 Bom 505. In those halcyon days, one of the members of Council was also Chief Justice of the Sudder Adawlut, and used to sit in cases where the Bench was equally divided in opinion. This official intimacy between the E. I. Company's servants in the Court and the Council was of ancient date; and it is almost forgotten nowadays that in his Code of 1827, Mr. Mountstuart Elphinstone, the greatest Governor, provided that for some years the judicial interpretation of the Regulations should remain with the executive Government, in which were centred the three powers of making, administering and interpreting the laws. That system, familiar to Native States and useful in backward provinces, was necessary in Bengal and elsewhere in earlier times, when the Government had to train its commercial servants in the duties of Judge and Magistrate, as we learn from Governor Verelst's minutes on Supervisors, and from the speeches of Lord Wellesley and Lord Minto at the Writers' College at Calcutta.

The old order has changed. A new era began with the direct Government of the Queen. By means of carefully drafted Acts and Charters, Imperial Parliament conferred and defined the powers of the Viceroys and Governors-in-Council, and the broad jurisdictions it assigned to the new and dignified tribunals it created, the High Courts of India. Since 1861 the conflicts between the two authorities have therefore been few and seldom violent. The most important was the Fuller case, which arose in 1876, when Lord Lytton was Viceroy and Lord Salisbury, Secretary of State for India. It is the leading case to show what control the Government asserts over the High Court; and though it is left unmentioned in Sir C. Ilbert's valuable Digest of the Indian Statutes, it seems to me to possess the highest interest as a matter of constitutional law, whether we regard the dignity of the parties, the seriousness of the arguments or the importance of the result. The case arose from hurt by means of blows given by a man named Fuller, in a fit of ill-temper, to a native servant, who died therefrom. The Judges of the High Court at Allahabad took notice that the trying Magistrate had let Fuller depart, with only a fine of thirty rupees, but they refrained from interfering, because no great violence was used and severe hurt was neither contemplated, nor could it have been foreseen. The Lieutenant Governor, Sir George Couper, thought no action was necessary in regard to the sentence of the Magistrate, and he informed the Viceroy in Council of these views. But the Viceroy published in his Gazette a regret that "the High Court should have considered that its duties and responsibilities in this matter were adequately fulfilled" by the expression of its opinion on the assault, and in the same paper severely reprimanded the Magistrate. The print coming under the eyes of the Judges appeared to them to contain "a grave censure on the High Court." In their solemn protest, they raised questions of magnitude. They deprecated the Viceroy's action on the ground that he ought to

avoid declaration of the law in a particular instance, seeing that such a declaration could not but influence the subordinate court, and that if any authority other than the High Court interferes, conflicting decisions "may confuse and impede the administration of justice." The Viceroy in Council demurred on this question, saying that they had expressed no opinion on the legal nature of the offence, *i.e.*, what kind of simple hurt or severe hurt had been committed with reference to the definitions in the Penal Code. Lord Salisbury upheld the demurrer, but also told the Viceroy that if he had uttered opinion on this point of law, "your orders, certainly, could not have been upheld." So one question of great moment is settled for all time. The Executive Government may not presume to give independent opinion on matters confided to the sages of the law. There is nothing new in this prohibition. It is long settled law, boldly uttered centuries ago by Sir Edward Coke to the face of King James the First, who wanted to sit as an amateur judge.

The Judges at Allahabad considered their acts in their jurisdictions of superintendence and revision to fall under the same doctrine. These jurisdictions had been delegated to the Court by Act and Charters: and Sir Robert Stuart, the Chief Justice, delivered his opinion that neither the Governor-General in Council, nor any other prerogative authority in India had any authority or right of interference. He added that no Home Secretary in England would dream of expressing regrets or approval or disapproval of the way in which English Judges discharge their duty.

In passing on the protest, Lord Lytton's Government relied on the Act of Parliament which vests in the Supreme Government "the superintendence, direction and control of the civil and military Government of British India," as placing on their shoulders the "entire responsibility of every department" including that of justice, and giving no immunity from criticism

to the High Courts. They said they would continue to use this power "on the principle that it is our duty in the ultimate resort and in adequate cases, to censure and punish flagrant miscarriages of justice; and to comment when necessary on the administration of justice in India." I should add that the conclave of Judges "did not question the competency of the Governor-General in Council to notice and punish misconduct on the part of an officer of a Subordinate Court." Lord Salisbury's orders are found in two despatches of the 22nd March 1877 printed in the Gazette of India, May 12, p 1297. They uphold the action against the Magistrate as based not on a view of law, but on his want of discretion, "his resolution to decide summarily and the nominal amount of his sentence." On the greater question, the reasons given are weighty and well stated. Lord Salisbury thought some functions of the High Court, to be strictly executive. Of course he refers to analogies at home, under the very eyes of Parliament. The supervision of the subordinate Courts in England is, he says, "confided to officers who form a portion of the Executive Government, and in respect of the tenure of their office, possess no judicial independence. Unpaid magistrates who misconduct themselves are reprov'd, or if need be, removed by the Lord Chancellor. In the case of stipendiary magistrates, a similar duty devolves on the Home Secretary." Lord Salisbury then decides the particular question raised. "In censuring Mr. Leeds and in expressing your regret that the authority responsible for so doing did not bring his proceedings under judicial review, Your Excellency was dealing with purely executive functions, which it is your special province to control. The fact that these functions are by an exceptional arrangement partially committed to the High Court, does not in my judgment, alter their executive character or withdraw them from the superintendence of the Executive Government." The Secretary of State then laid down his views on the general question

of relations, although he did not think it was raised in the facts before him. "It seems to me that in this contention the vital difference between the tenure of English and Indian Judges is overlooked. Until the Act of Settlement all English Judges held their offices, as English Judges do now, during Her Majesty's pleasure. When Parliament desired to secure their independence and to withdraw them from the authority of the Executive, it enacted that their Commissions should be made during good behaviour." But in 1861 Parliament enacted that Indian Judges should hold their offices during pleasure, a distinction neither accidental nor inoperative. "The right to dismiss any person holding an office carries necessarily with it the right to indicate the conduct, which may, if persisted in, incur dismissal." Lord Salisbury hoped, however, this wide question might long remain purely speculative. His desire has been fulfilled. The Government of India has refrained from using the powers it asserts. This forbearance is a proof of the statesmanlike habits of the eminent men who compose that Government. For it is plain that the doctrines announced by the India Office might, unless great circumspection is used, lead to the very evils which, occurring under the Stuart Kings, led Parliament to pass the Act of Settlement. The Secretary of State does not cite a single case in which a Judge of England has been censured for want of judicial discretion, as distinguished from misbehaviour. It is apparent also, at least to Judges who have wielded the powers of superintendence and revision, that in ordering the writ to issue which vexes a man twice, already tried in due course of law, and then in increasing or reducing a sentence, or quashing a conviction or, an acquittal, the Judge's mind is exercised judicially, over all his experience, over many circumstances, the length of time, the calling, sex, character and conduct of the accused and his opposers, the state of the district and other matters. How then is it possible for the Viceroy in Council to lay down any rule? How can he say when imprisonment or fine should be awarded,

when both are legal? How can he fix the amount of fine, or say whether it is excessive, a question which both the Bill of Rights and the Indian Penal Code refuse to reduce to figures? The possible evil struck at by Lord Salisbury can also be avoided by other means. It has been the practice of the Bombay High Court to invite the Local Government to notice cases under revision. Sometimes we merely informed the Government Pleader of a case: sometimes we stated our desire to hear him. A few years ago an armed outbreak occurred in Khandesh, and a prisoner was properly sentenced. But on appeal the Sessions Judge found some charges unproved; and what sentence remained out of the total was in his view too lenient. One chief question of course was whether any further interference was needed by way of example. The Government Pleader informed us that the District Magistrate who had suppressed the disturbance, thought more ill than good would be done, if we enhanced the sentence. We accepted the view of the Government, as the responsible keeper of the public peace. The Crown has a right to appear in any Court. It can therefore intervene in any case, or move the High Court to notice it,—an obviously better course than sitting still in the interval and then waking up to smite the Judges.

The King's subjects may, however, feel grateful for the complete assertion of authority and responsibility in all matters really executive. Lord Mayo acted on these principles in regard to the Kuka riots in the Punjab. While insisting that the local magistracy should attack and put down offenders rising in arms against the law, he censured and punished the former for slaying these same offenders, when prisoners in the jails awaiting their right of trial by the judicial tribunals. I may also refer to a state of things at Bombay, where neither the Local Government nor the responsible judicature stood forward to check a long and general oppression of the natives. The submissive people had been handed over to the

tender mercies of the Police, whose European heads were allowed to perpetrate undisguised cruelty under the pretence of acting as Justices of the Peace. In vain did the Grand Jury remonstrate, presenting Lieut. Tod as a public nuisance in 1879, fit only to serve some despotic Government, "with a Bastille at hand." Eleven years later this man was convicted of corruption, but only reprimanded and allowed to resign. His successor walked in his ways, until made bold by impunity, he conspired to save some miscreants who had tried to murder a civil servant, for which corrupt action he was sentenced by the Recorder, Sir James Mackintosh, to a year's imprisonment in November 1810. The European community being roused, Mackintosh was obliged to report on this surprising tyranny, and we find in old Morley's Digest the pathetic story of those miseries of long ago. Within a period of eleven months, this audacious officer had banished 217 persons from the island. Every use of his lash was an illegal assault, every rupee of fine since 1753 was an unlawful levy. He forced his victims to work in public gangs with all the disgrace of chains; and he assumed the power of pardon at his caprice, a dangerous means of filling his own pockets. Mackintosh makes a mournful confession that he himself had "not done those things which he ought to have done. I repeat," he says, "that I take shame to myself for having suffered a pacific temper, zeal for authority and a fear of change, to have lulled to sleep that vigilance in maintaining the authority of the law, which was my first and most imperious duty." I wonder what Lord Lytton and Lord Salisbury would have said to him, and I would like much to know why the Bombay Government winked at the misdeeds of their own Dogberry, the ruffian Policeman, for so many years. The historian would readily forgive any benevolent despot, who, in such a state of things, would waken the two sleepy authorities by knocking their heads together. The wisest of sovereigns admonishes us in holy writ that there

is a time to speak, as well as a time to be silent; and if ever the remedy of Prætorian or prerogative powers is to be leniently viewed, it is when a timid people is thereby rescued from corrupt Judges. One reason for giving the Governor-General in Council a control over the Governors of the small settlements was that such abuses should be corrected. This control would have been useful in the affairs of the bribing Mamludars, which arose in the Bombay Presidency in 1888, in the prosecution of Mr. A. T. Crawford. Lord Reay's Government had "guaranteed immunity from official or departmental punishment or loss" to certain witnesses, who were magistrates and judges, "in case of payments for promotion.* He insisted therefore that after these men had confessed on oath that they had obtained judicial offices by bribery, they should be continued to dispense justice to the natives as if no such wickedness had happened. The Viceroy, Lord Lansdowne, instead of giving a tacit approval, might, and I think, ought to have used the undoubted controlling power, on which Lord Lytton had relied so as to revoke the promises already made and prohibit the making of fresh ones. The speeches made by him and his advisers in the Legislative Council shew that they were aware that it is contrary to the law and constitution of the British Empire that corrupt persons should sit as Judges; and they were active in seeing the orders of the Secretary of State, Lord Cross, carried out by Lord Reay's Government, which was commanded to break its own solemn promises as invalid. These later events were caused by the protests emitted by Mr. Justice Birdwood and myself, based on the doctrine of law and a long series of precedents, including the removal and punishment of a corrupt Lord Chancellor. We insisted that the Queen was bound by her coronation oath to keep such persons off the Bench. The Bombay Government called this action of ours

* For the exact words see the *National Review* 1898 p 900 in "the Tragedy of Arthur Crawford": and the case of *QE v. Chagan Dyaram I. L. R. 14 Bom. 341*.

an "unjudicial denunciation" and our advice "extremely inconvenient," but as we have seen, the superior authorities took an opposite view, and acted in accord with the solemn judicial remonstrance.

This is the most important point of constitutional law which the case discloses. It affirms the right of His Majesty's Judges to inform the Crown in judicial matters, where the ministers of the Crown are ignoring the law. That right was practically settled by the case of the seven Bishops, where a more celebrated Declaration of Indulgence of improper persons in office led up to the abdication of James II. In neither case has the identity of the framer of the Declaration been disclosed. It never was an offence for any subject to declare the law to the King. To dictate a policy is quite a different matter; and I cannot say that the Viceroy was wrong in reprimanding certain civil servants who had called on Lord Cross to reverse the orders of dismissal of corrupt persons. Besides the protest of the seven Bishops, we had a precedent which may or may not have been known to Sir James Mackintosh. It is found in Chief Justice Anderson's Reports (vol. 1 p. 297) and is fully set forth in Hallam. The Judges of both Benches and the Barons of the Exchequer thereby protested to the Ministers of Queen Elizabeth about the grievances of her subjects who were being illegally sent to prison and fined by Privy Councillors, using a pretended prerogative. Under the Tudors and the Stuarts, complaints like this were made by Judges at their peril. It is otherwise now when they lose nothing by outspoken learning. When the excitement has passed, the ruler respects their honesty; and so we find that Mr. Justice Birdwood soon received a signal honour from the Crown, and was besides made a member of the very Government which had aptly enough described his judicious advice as 'extremely inconvenient.' This neat phrase is however hardly strong enough to qualify the evil result, deprecated as we have seen by the Allahabad

Judges, of any attempt of the Executive Government to interpret the statutes authoritatively. An instance occurred in a minute written by Sir Raymond West, then Judicial Member of Council, in the Crawford case, about the confessing Mamlutdars. In trying to confute Mr. Justice Wilson, he propounded a sort of metaphysic of the "inevitable," and his minute being published, was acted upon by a Magistrate. The failure of justice thus caused had to be set right by the High Court, after the parties had suffered great hardship and expense, from an erroneous notion of the law about accomplices. The report of this painful case *QF v. Moganlal* I. L. R. 14 Bom. 115, shews the constitutional danger of tampering with any great rule of evidence.

I have dealt with the two most important cases of last century for three reasons. They are passed over unnoticed as yet in most accounts of the constitution of our Indian Government. The conflicts, to which the second case bears witness might easily have been avoided, had the Executive followed the usual course of consulting the Law officers. These two cases roused public opinion; and the disposal of the question about corrupt Judges was Parliamentary, the matter being debated time after time and in both Houses.

I refrain from considering whether, as in the earlier days of Sir Barnes Peacock, Indian Judges should be admitted to the Legislative Council, as that is a matter of policy, on which there is no strong call of public opinion. I will conclude with a few remarks on a subject, where my own experience led me to be jealous of the honour and tender of the feelings of our Native Judges, I mean as to scandalous aspersions. It is obvious that the strength of Government would be shaken if the tribunals turned themselves into receptacles of scandalous attacks on high executive officers, who, as much as Judges themselves, have a valuable property in their characters. This legal aspect is presented in the case of *In re Olive Durant* I. L. R. 15, Bombay, 488. The principle does, in my opin-

ion, apply to unsworn petitions, private letters and newspaper paragraphs, libelling inferior officers and sent to the High Court by post. An official requires as much protection as a private person, against whom the complaint must be made and sworn to in open Court. The Privy Council, to which our Indian High Courts are subordinate, has remarked how easily in a land of intrigue, suitors are led to ascribe sinister motives to the public servants, and how therefore it is of great importance that officers of justice should never be exposed to even the suspicion of improper influences. Any wanton action against them should surely be avoided by persons in power. On the other hand, the decisions show that a Judge may be suspended, when he indulges, say, in drunkenness or lewdness, not amounting to crime in so open and shameless a manner, as to discredit the office he holds. With these remarks on the settled policy of the law, I turn to an incident which occurred in Burma when Sir C. Aitchison was Chief Commissioner and I held the post of Judicial Commissioner with the powers of a High Court. A certain Magistrate was resting quietly one evening in his own house in a remote region, when he heard the tramp of armed men and knew at once that a murderous attack would be made. To protect himself, his infant child and its mother, he took his sword, met the men outside the bedroom, and in the fight that ensued, received a fearful wound himself and slew one of his assailants before they ran away. It is necessary to mention a fact otherwise irrelevant. The Magistrate had set up house, without entering into wedlock, but he lived in the usual quiet domestic way. There was, I believe, nothing to cause any suspicion of his justice. In a few days the news came to Rangoon, and I was startled by a printed missive from the Chief Commissioner. It connected the occurrence and the unwedded domestic life with an apprehension that our British justice might be tarnished, and it menaced me with official

injury, if my official duties should suffer from my adopting that mode of living. The Recorder of Rangoon received a replica of this letter-missive the same day. Neither of us had at all in contemplation to adopt the domestic system it denounced; and we were startled to learn that several Sessions Judges and District Magistrates of exemplary life and conversation were as much puzzled as we were by similar admonitions. The recorder agreed with my opinion that the Chief Commissioner's action went beyond the Privy Council decisions; and it did not seem justified by the ruling of the Viceroy and Lord Salisbury in the Fuller case. For we were not responsible to the Chief Commissioner: neither was he the Viceroy in Council. Besides, no fact was averred against either of us; and yet that made it difficult to assume the air of injured innocence and demand an apology: at the same time it would have been contrary to the maxims already set forth to have allowed any suspicions to undermine the administration of justice, based on mere surmises that, sometime or other, some judge or other might wander from the ways of equity. To allay the panic I sent for the press reporters and took the printed message into open Court where I pointed out that the law invested me with the care of justice, and that nothing had appeared in any case, or in any complaint, or at my own inspections of courts all over Burma to give rise to the slightest fear that justice was being tampered with. Moreover, the law, being no respecter of persons, paid no regard to race or to sex or status; any person acting corruptly might be indicted and punished. Public opinion was relieved by this solemn statement: and the matter dropped.

I have often wondered since on what sort of advice the Chief Commissioner acted. I can find no analogy in English law or recent Indian history to justify the letter-missive. In days of old the law-maker and ruler was also the prophet; but in our time no public servant as such, no member of council, can ascend like Moses

to Mount Sinai to bring down the moral law to the children of men. While the East India Company's servants were still mercantile, the Directors sometimes commanded attendance at church, and required that the Sabbath should be kept holy, and discountenanced gambling, drunkenness and lewdness. But they sent forth Chaplains to persuade those servants by the terrors of the Lord and the fear of the world to come. They were right in acknowledging the power of religion. A Chaplain is entitled in his pulpit to say things in presence of the highest Judges which even the highest executive may not say; and doubtless if any widespread evil had infected the Courts of Burma, the Chaplains there, full of zeal and the Holy Ghost, would have spoken out for righteousness like the prophets of old. Our records of 1676 afford an example of what I mean in the letters of the Rev. Patrick Warner from Madras. In conclusion, I would fain say that this Burma case shews the wisdom of that remark of Sir M. Sausse which begins this article, and hope that our study of the facts will encourage the high mutual respect which the executive and judiciary should display to each other.

JOHN JARDINE.

LOVE NEVER FAILETH.

"Love comes and goes," they tell us. Can it be
That such a fleeting folly then is Love,
—A rustle mid the greenery above
That fans the leaf nor ever sways the tree?
Call it not Love, it is but Phantasy,
An idle breath, a whisper that may move
Haply some twig as idle, never prove
God's benediction blowing from the sea.
Fancy perchance may frolic o'er the plain
Tossing the tendrils of the wanton weed
Seeking forgotten flowerets all in vain:
Love bends the forest giant like a reed
And lifts him heavenward lustier again
And glorifies the mountains in the deed.

R. S. L.

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THE ROMANCE OF FLOWERS.

THE motive of all science is the attainment of truth; the only merit of fairy tales is that they are the image of the truth, a simulacrum invented to stimulate the intellects of children, not yet robust enough to sift truth from error. Yet of the thousands of grown persons in this country who are not obliged to toil or spin, how great a proportion seek all their mental amusement in fairy tales or fiction, which is the same thing: how few ever think of turning to science as a source of recreation. Some titillate their ambition by the collection of old postage stamps, others by field sports and competitive games, and these may be held harmless palliatives of much leisure, the last named, indeed, being valuable, inasmuch as they develop the limbs and brace the constitution. But many a man's life might be turned to better account, many people would become conscious of a motive for living, were they to turn their faculties to unravelling the secrets of Nature. To the majority—far the greater majority—of educated persons Nature is a closed book: but a book which any one who has leisure may learn to open. Some of its pages, indeed, have never yet been traversed by mortal eye; but patient hands are at work, year after year, opening new pages. Anybody who chooses to turn his hand resolutely to the work may live in good hope of prevailing to open a new chapter, and some of these chapters are far more wonder-stirring and exciting than any artificial fairy tale.

Let us glance at a few that have been deciphered already. We will take the volume of botany first, being, perhaps, that in which the ordinary mind least expects, any stirring passages. You cannot spend a quarter of an hour in a country lane or on a bleak hillside without being surrounded by plants of many kinds, each of which has a story for him who has ears to hear and eyes to see. We will go to the very bottom of the scale first, if you please,

among the humblest of all vegetation, the Cryptogams—those plants which are destitute of the chief attraction in most plants—flowers and leaves. In this group are contained the different species of fungus, lichen, and algæ, or seaweeds. A humble family, you will admit, yet it has a dignity of its own, for it is among them that the nearest approach to animal is made by any vegetable. Indeed, one order of the group, called *Myxomycetes*, so closely resembles certain animal organisms in its habits of life that, though classed as a vegetable at present, many biologists hold their judgment as to its true nature in suspense.

Now, if there is one characteristic which more than any other in the popular view distinguishes the fungus from other plants, it is its sudden appearance and rapid decay. A "mushroom growth" is proverbial for all that is evanescent. Yet it is in the family of Cryptogams, among the lichens, which are near relatives of the Fungi, that probably the most endearing of all vegetables are to be found. Some of those organisms, which look like mere grey or orange stains upon the rock, have a vitality which puts to shame the majestic growth of the forest. Man's life is so fleeting that we can only guess at their age; the progress of some lichens to maturity is so slow that it would require many generations of botanists to record it. In the year 1836, Dr. Thayer, of Philadelphia, happened to examine some patches of a certain lichen, *physcia parietina*, growing on a wall under circumstances favourable to its development. He made careful descriptive notes and drawings of the plants. Forty-five years later, in 1881, he revisited the same wall, and found that, although certainly progress had been made, fructification had not yet begun—the plant had not yet reached maturity. It is, of course, impossible to hazard any guess how old the plants were when he first saw them. They may have sprung from spores deposited in the days of Queen Elizabeth, but, at all events, the half century during which they were under observation had only brought them

some degrees nearer the principal function of all life—reproduction. In a similar lapse of years an oak, which we look on as the type of enduring life, would have become a vigorous acorn-bearing tree.

In olden days, when books were few, and readers not over-critical, travellers and would-be philosophers stuffed their pages with prodigies. The appetite for "eye-openers" was insatiable, and the grossest falsehoods were copied from one writer to another, and accepted with wonder indeed, but without doubt. But now it is your patient, plodding student of science who is the true "eye-opener" in the better sense, revealing to his fellows the wonders of the world in which we have our being. It is not very many years since the true meaning of flowers was made plain to us. Formerly they were supposed to have been prepared for the glory of God and the pleasure of man. That they contribute to both no one will care to deny, but how greatly both these functions are enhanced when their primary function is understood. Flowers are no more than local modifications of leaves, closely associated with the reproductive organs. Just as the faculties of all animals are exerted to their highest pitch in provision for and defence of their young, so the whole economy of a plant is directed to the perpetuation of its species. Now, it is essential to the vigour of the offspring of most plants, as it is to that of young animals, that the parents shall not be too closely related; but inasmuch as animals can move about and choose their mates, some other provision has had to be made for plants, which are stationary. One such provision has been found in the action of insects flying from flower to flower, and carrying the pollen, or fertilising agent of one to the receptacle of another, thus securing cross fertilisation. Plants have been enabled to make it worth the while of insects to visit them, by the power of secreting honey in their blossoms. But the presence of honey must be advertised, and a large volume might be filled with the description of the various devices of advertisement. Another, equally

large, would be required to describe the varieties of mechanism intended to prevent the removal of honey without disturbance of the pollen cells, and to ensure the visitor carrying some of the fertilising dust to the next flower it enters. Showy colours, attractive forms and streaks and convenient shape are some, but not all, of the methods of advertisement. The odours of flowers, which men conceitedly suppose to have been devised for their special delectation, are intended to attract insects — visitants. Many flowers emit their fragrance only at night, whereby moths and nocturnal beetles may be drawn to them. Such flowers are most commonly white or pale yellow so that they may be seen in the dark. The odours are not always agreeable. The giant *Rafflesia*, with flowers fully a yard in diameter stinks like putrescent meat, and attracts swarms of carrion-loving flies, necessary to its proper fertilisation. That is a tropical plant, but in English gardens some forms of arum may be grown in the open air, notably *Arum dracunculoides* and *crinitum*, which practise a similar deception. The last named is probably the most hideous flower in existence, for which reason it is very seldom seen. It resembles a gaping wound, lurid with gangrene, nearly a foot long.

Mr. Wallace has shown how, in those islands of the South Pacific which possess numerous humming birds and flying insects, the flowers are brilliant and in great variety and profusion; whereas, in the Galapagos islands, where there is a total absence of humming birds and insects, all the flowers are inconspicuous, and depend entirely on the winds to waft pollen from one to the other.

But some flowers, on the other hand, form a striking exception to this rule of cross-fertilisation. The bee and fly orchids, for example, which would be much more commonly seen on our English chalk downs but for the ravages of greedy collectors, fertilise themselves, and don't want to be bothered by buzzing bees and flies. So look you what a cunning device has been resorted to. No bee will enter a flower in which another bee is already at

work, therefore to protect the entrance, the lip is enlarged into a process exactly resembling the hind quarters of a bee (in the fly orchid it resembles a large fly).

To the spider orchid, another British species, it seems to have occurred that a still more trying shock might be administered to the nerves of troublesome insects, so it displays in its orifice the likeness of a large spider.

It is difficult to account for such an ingenious defence. Plants, we must believe, have no intelligence: can the Ruler of the Universe occupy himself in imitating the humblest of his own creatures? or is this really the sportive work of fairies? It is the obvious duty of those who deny the existence of an Intelligent Will directing the universe, to explain the origin of the unmistakable imitative design in these flowers. It can scarcely be no more than an accident that the presence of mock bees and spiders, protecting the blossoms from the visits indispensable to the vigour of most races of plants, should coincide with an extremely rare property of self-fertilisation. To explain the puzzle in that way is to ask us to accept a belief infinitely more difficult than the one we are told to reject.

Some flowers are so small that, if they appeared singly, they might despair of attracting insects; so instead of enlarging themselves they make up a display by collecting themselves in groups. Of such are those known as *Umbelliferae*, of which family Hemlock, Goutweed, Parsnip and Angelica, are familiar examples. But a still more remarkable development of vegetable communism takes place in the *Compositae* order of which the daisy is a good type. In these plants you find an immense number of perfect, but very small, flowers united in one head within a common involucre. In the Tansey these composite heads present the appearance of a yellow button, in the Thistle that of purple tassels. But a strange arrangement is seen in such plants as the daisy, Corn Marigold and single Asters. In these, the outer florets of the head sacrifice

themselves in order that all their energy may go to display. They lose their reproductive organs, prolong themselves into simple straps, and assume bright colours so as to attract passing insects to their pollen-bearing brethren in the centre. The flower head thus assumes the familiar aspect of a golden or dark coloured nucleus of fertile florets, surrounded by flat rays, gaily tinted with yellow, red, or violet, or, as in the daisy, pure white.

Reference is made here, of course, only to the flowers which the art of man has not perverted from their natural shape. In double blossoms of the composite order, like chrysanthemums, double daisies and double pyrethrum, *all* the florets have been forced to surrender their fertility, in order to add to the showiness of the flower. In double flowers of other orders, such as carnations and garden roses, cultivation has been directed to alter the organs of reproduction, the stamens and authors, into petals or sepals. Shakespeare, who knew something about everything, makes Perdita, in the "Winter's Tale," speak her mind about them thus :

"The fairest flowers o' the season
Are our carnations, and streak'd gilliflowers,
Which some call nature's bastards : of that kind
Our rustic garden's barren : and I care not
To get slips of them
I'll not put
The dibble in earth to set one slip of them :
No more than, were I painted, I would wish
This youth would say, 'twere well."

In losing their fertility, the flowers are also deprived of honey glands ; for, the visits of flying insects being solely beneficial to plants from the part they play in cross-fertilisation, there is nothing to be gained by attracting them to flowers incapable of reproduction. It is, however, a remarkable fact, and one lucky for florists, that most flowers rendered sterile by doubling, retain and sometimes increase their fragrance.

Now, in order to show that the truths of science are no whit less strange than the fairy tales recounted by ancient writers, here is one of the latest veritable "eye-openers." Many years ago an Italian botanist discovered in the mountains of

Sumatra a gigantic aroid, a plant of the same family as the lords and ladies of our hedgerows and the beautiful Ethiopian lily of our greenhouses. The tuber was so large, measuring many feet in circumference, and emitted such an overpowering odour, that he could hardly persuade men to the labour of uprooting them. However, after many days, he succeeded in getting a brace of entire plants, which he directed to be placed on a kind of hand-barrow for transport. The bearers turned sick with the stench, and whether by accident or design, both the enormous bulbs were lost over a precipice. The botanist sent home a description of the plant which was so startling as to receive very dubious acceptance among men of science. Travellers' tales ! they thought, for the leaf-stalks were said to be ten feet long and the leaves nearly fifty feet in circumference. The spadix of the flower, that is the central column rising out of the spathe, measured six feet in height. No such arum was ever known. Luckily for the traveller's reputation, he sent some seeds home to Europe. They were red and about the size of olives. Some of these were sent to Kew Gardens, where about ten years ago they were sown in a high temperature. They grew and grew till at last there was only one place capable of holding the plants—the Victoria Regia tank house. Finally, great excitement in the scientific world was caused when, in 1892, one of them showed signs of flowering. The signs were fulfilled : the great spathe expanded, revealing the monster spadix and discharging an overpowering stench. *Amorphophallus titanum* stood revealed, and the good faith of the Italian botanist was vindicated.

HERBERT MAXWELL.

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THE LEGEND OF KANNAPPA NAYANAR.

"Wherewith shall I come before the Lord,
and bow myself before the high God?"

... MICAH—VI-6.

"What power miraculous on yonder height
Of Kálahasti dwells that thus my feet
With force resistless drags, and renders still,
With ev'ry step towards it I advance,
The burden less upon my shoulders broad
Of this wild boar, the trophy of my chase?
Here shall I set it on this river's bank;
And while they roast the beast, up shall I run
The mountain slope and find the mystery out
That hath so strangely urged my footsteps here."
Thus Tinnan spake, the son of Nágan old,
The Vedar chief whose sole delight in life,
'Midst sound of drums and horns and barking

hounds,

To lead his veteran huntsmen 'gainst the beasts
That with him claimed the sway o'er Uduppúr.
The sturdy mountaineer that long had pined
For children had at last, by Skanda's grace,
His tutelary deity, begot
This only son, the joy of his old age,
Whom from his earliest 'childhood brought he up
The endless perils of the chase to face,
That through the country round his bravery
Became a by-word, and the mountain folk
Styled proudly their young chief 'the tiger's cub.'
O little did they know how soon he was
A loftier and a nobler name to bear,
And take a place enduring 'mong the band
Of holy saints, who in their fervent faith,
With self-negating love the Eternal sought,
The mystic Dancer in the Golden Hall,
And in His worship offered up their life.
To his attendants true that through the chase
Had by him kept, the lusty huntsman gave
His morning's trophy. Then without a word,
He rushed across the stream and up the slope
Of holy Kálahasti, till he came

To where as by a miracle was changed
His entire nature. There above the ground
Great Hara's mystic emblem stood bedecked
With fragrant leaves and flowers sweet, and lo!
The instant he beheld it, all the dross
That round his soul had gathered vanished straight
And with strange rapture quivered his whole frame.
For Tinnan felt his being purified,
Illumined by a sudden rush of light,
Of pure devotion and of fervid love
For the Supreme to him now first disclosed.
Oh who can fathom God's mysterious ways!
Who say when in His grace the bliss supreme
Of union with the Universal Soul,
Th' emancipation final from all birth
Will be achieved! He holds the leading strings,
And through our round of birth in earthly worlds
He guides us, till the warpings of the stuff
Are all removed, and at th' appointed hour
On Pis broad breast He gathers us to rest.
One instant stood young Tinnan thus transformed,
His every feeling swallowed up entire
In rapture and exhilarating love
For gracious Pasupathi, and his soul,
Touched by a dim remembrance of past deeds,
Throbbing to reach the Seat of Blessedness,
E'en as the needle trembles to the pole.
Then as a mother, who her long-lost son
Finds unexpected, with impetuous speed
Rushes to clasp him to her bosom, so
He threw himself upon the image straight,
With fondness hugged it in pure ecstasy,
And laved it with a flood of joyous tears,
And covered it with kisses rapturous.
Was one so blest as he as there he lay
Entranced, his arms in tenderness thrown round
The form of Ananda, to whom he lisped
In melting tones the message of his soul!
"Oh Primal Cause! Oh Omnipresent Bliss!
Oh precious Balm that soothes all woes of life!
Oh rare Ambrosia that Thy servants prize
Higher than nectar from the sounding sea!
Oh flawless, priceless Gem that gods and saints

And men alike, with delectation great,
With awe and reverence wear on their crown !
Oh ancient One, Incomprehensible
And Infinite ! True Source of all life's joys !
To me, Thy servants' servant, hast Thou shown
Thy flowery feet, to e'en the mystic scrolls
Unknown. Supernal Lord ! I hold Thee fast,
Content to be Thy slave, whose only care
To crown Thy flowing locks with chaplets sweet,
And do Thee service, that my idle round
Of earthly birth may cease. On me, O Sire !
Of merit void, hast Thou choice grace bestowed.
O praise be Thine ! To Thy twain feet be praise !
The way Thy will ordains befits Thy slave. "
He paused ; and mutely wondered if the Lord
Of all the worlds, whose fiery form of yore
In blazing brilliance stretched throughout all space,
Stood lonely thus in that vast wilderness
Which teemed with wildest beasts, his favourite

haunt,

That he no more might wallow, and perchance,
His faults forgiven, he might be redeemed.
And at the thought, he to the image clung
More closely still, as Mārkaṇḍeya did
What time by gloomy Death he was assailed.
As thus he lay th' enthusiast pondered how
He might do service to his new found God,
'Fore whom, e'en as the cow yearns for its calf,
His longing soul had strangely melted. Home
And kin and friends and city he forgot,
His thoughts riveted on the image dear
That to his vision blazed with light superne.
What gifts shall he before the feet of Grace
In meek devotion place ? will flesh of beasts,
Fish from the running brook, or luscious fruit
That 'midst the foliage dense like rubies gleamed,
Or sweetest honey dripping from the boughs
Prove gifts appropriate ? But loath was he
To leave the image in the wood-land lone ;
For who would guard it when he was away ?
Nathless he rose, and back reluctant ran
To where his comrades, wond'ring what delayed
Their chief, expectant waited, with the

Well roasted for the feast. His face distraught
And look so far-away, the mountaineers
With fright beheld ; but ere from their surprise
And fear, they time had to recover, he,
With speed of lightning, from the flesh cut off
The best and tend'rest portion which he wrapt
In leaves, and hastened back across the brook
Filling his mouth with water, which he poured,
As though it were from holy Ganga brought,
Upon the image with devotion rare,
Bestrewed it with wild flow'rs and presented
The roasted meat, and in his simple faith
Called on his Master to accept his gift.
Just then, as though the Deity desired
In His unbounded mercy to protect
The young devotee's unsuspecting faith,
That in the fulness of simplicity
Believed the offered food would be consumed,
The sun went down, and all was wrapt in night.
The youthful chieftain with his bow well strung,
That tense withheld the anxious arrow's flight,
All through the night unwearied watch and ward
Around the solitary image kept,
Lest roaming beasts or prowling birds molest
His Master's peaceful slumber. Then at dawn
He to the forest hied in search of game,
That he at eventide with plenteous flesh
For the repast of Rudra might return,
The awful Dancer in the burning ground,
Clothed in fierce tiger skin, his breast adorned
With gruesome skulls and angry writhing snakes.
Meanwhile a saintly old ascetic, versed
In sacred lore and mystic Tantric rights,
Who led a life of piety austere,
Was from his hermitage that stood close by,
In deep devotion walking up the hill
To do his daily worship at the shrine.
His body was with holy ashes smeared ;
And in his left hand he a basket full
Of sacred *Bilva* leaves and flowers bore,
While in his right he held a vessel filled
With limpid water from the mountain stream,
Where his ablutions, ere the eastern sky

The faintest streak of greyish dawn had shown,
 He had performed. The sacred letters five
 That from the bondage of impurity
 Secure release, and for the adoring soul
 The priceless boon procures of Siva's grace,
 The holy anchoret incessant conned.
 The aged hermit paused before the shrine
 Which in the shimmering light of dawn appeared
 As he had left it on the previous morn ;
 And with his ancient head in reverence bent,
 He with his hands clasped o'er his head began : —
 " Hail source of all, whose being knows no end !
 Whose saving grace the clinging cords divides
 Of earthly ties, and lifts thy faithful slaves
 Unto thy golden court of light and joy !
 My life's sole Master, hail ! awake ! for lo !
 The cocks have crowed, the *Kuyil's* dulcet strains
 Of rapturous melody now fill the air.
 Star-lights have paled before the mustering dawn.
 Arise, and in thy endless love receive
 My adoration and my worship. Deign,
 O Lord ! to show Thy lotus feet that I,
 Thy servant, may in homage thereupon
 Twin wreaths of fragrant Cassia blossoms lay.
 Deign, too, to show Thy sacred face which shines
 In glory like the uprising sun, and beams
 With grace benign and loving tenderness,
 For frail humanity that zealous tries
 To follow Thee and Thy behests fulfil.
 Essential Sweetness pure ! Ambrosial Fount !
 O give me grace to see Thee as Thou art.
 Thy feet my only stay, Thy face my hope."
 With that the pious hermit prostrate fell
 Before the image reverent, and rose
 And beat his cheeks in all humility,
 And shouting 'Hara' he in transport danced.
 By this, the Sun his glorious throne had set
 Upon the eastern hills and thence he streamed
 In joyance, as in Holy festival
 Young children saffron spurt in merriment,
 His light of gold that overflowed the world.
 The hermit stooped the refuse to remove
 Of leaves and blossoms that his loving hand

In deep devotion and humility
 Had on the image placed the previous morn ;
 When back he started from the holy sign
 With pain and terror painted on his face,
 As though an adder vile had on him sprung.
 Horror of horrors ! Did his eyes see true ?
 How came such vile abomination there,
 Such impious pollution of the shrine ?
 With anguish inexpressible, he saw
 Before the sacred presence scattered lay
 Masses of loathsome flesh and bones ; and lo
 The mystic symbol of redeeming grace,
 Which he with pride was wont to purify,
 With consecrated water, and adorn
 With sweetest Cassia and with marmelos
 And worship with all rites ordained of old,
 Even the holy *Lingam* stood defiled.
 He stood aghast, his mind with horror filled,
 His body trembling like an aspen leaf
 At the strange scene ; then with a shudder thought
 Of mighty Rudra's all consuming ire
 Which, as the stories tell, the Gods appalled.
 And filled with sorrow for the hapless boor
 Who had so wantonly the shrine profaned,
 The hermit thus Trinétra's grace besought :
 " What sinful hands of godless mountaineers
 This desecration indescribable
 Have caused ? Who thus Thy wrath has braved.
 O Primal Lord, that in the days of yore
 Destroyed the Daityas with their cities three,
 And quelled the scoffing sacrificer's pride ?
 O Virabhadra's Sire ! Not even gods
 Thy nature understood. And those, whose life
 In slaying and devouring beasts and birds
 Is spent, how are they better than the brutes
 Of this wild forest ? O Transcendant Lord !
 Great Master ! Heaven and earth and all therein
 Thou didst ordain and wilt destroy ; but lo !
 Thy mercy's infinite as is Thy power ;
 Thy grace alone redeems us from our sins.
 Forgive, forgive the thoughtless sinner's wrong."
 Then making low obeisance, he began
 The offal to remove and cleanse the place

With consecrated water ; bathed again,
 And then his worship at the shrine performed,
 As by the Sacred Writ ordained of yore,
 Devoutly chanting vedic hymns the while.
 But soon his soul was ravished, and his mind
 In bliss dissolved, his frame with transport thrilled;
 And with his hands outstretched and clasped, he fell
 Full prostrate on the ground as in a trance,
 In adoration of th' Eternal Truth,
 Pure Essence Multiform, transcending thought.
 His worship o'er, back to his hermitage
 Th' ascetic slowly went, his mind, which late
 By the strange profanation he had seen
 Had been disturbed, now with delight elate,
 A full thanksgiving to the Lord Supreme.
 O seek ye, when there yet is time, His grace ;
 Give Him your love, and sing His praise with joy,
 And at His feet the homage of your soul
 In meek devotion lay, that from the bog
 Of fivefold sense ye be released and raised
 To where his saints in glory shall abide.
 Meanwhile had Nagan with deep sorrow heard
 Of Tinnan's strange affection ; and in haste
 By priest and witch accompanied he came
 To exorcise the demon and win back
 His son beloved ; but alas ! in vain.
 The young enthusiast's frenzy gathered strength
 As he his sire beheld. He laughed and danced
 And shouted, sighed and wept, fell down and rolled
 And rising ran away, as though bereft
 Of all his senses ; and his aged sire,
 His heart with sorrow laden, home returned.
 And so again when at the close of day
 The gorgeous glory of the western clouds
 Was disappearing, the young mountaineer
 Returned provided with the flesh of beasts,
 Which in a heap he placed before the shrine
 And on his God he called t' accept his gift :
 Then with his arrow ready on his bow
 Kept zealous guard as on the previous night,
 And thus it happened when the hermit came
 Each morn his worship to perform, he saw
 The self-same profanation at the shrine ;

And much he wondered who the woodman was
 That blindly thus to his destruction rushed.
 At times the mild recluse his patience lost,
 And swelling indignation shook his breast
 As day by day he saw this sacrilege
 Repeated, yet the author left unscathed.
 What was his life's devotion worth, if he
 Allowed a woodman with impunity
 To scoff the sacred presence of the Lord,
 With his vile deeds ? Woe worth the day when first
 His eyes upon th' abomination fell !
 And shall he see the sanctity defiled
 Of Mahadeva and yet not pronounce
 His potent curses on the mountaineer
 That in his sin so obstinate remained ?
 Shall he not Rudra's wrath evoke to smite
 Th' offending hand ? But no ! His Sire Divine
 Hath in His wisdom thought it fit to leave
 Alone the rude defiler. What was he
 That he his fellow-mortals should condemn ?
 His only work to serve and wait and learn.
 One morn, his worship o'er, the hermit sage
 Whose mind the burden of the mystery
 Had sore perplexed, in supplication stood,
 His whole affection centred on his God,
 Devoutly praying that the scales which hid
 His vision in his grace may disappear.
 Revealing what his master meant that he
 Who all the joys of that mad world had left
 To love his feet alone with perfect love
 And to them cleave for his salvation dear,
 Should from his strange experience understand.
 "Master ! Sole refuge of my yearning heart !
 Hast Thou Thy servant in his hour of need
 Forsaken ? If from me Thou grace withhold,
 If Thou Thy glorious fellowship refuse,
 Shall I not perish, I who have so long
 The saving mystery of Thy sacred name
 In love and reverence repeated, sung
 Thy endless praise and gloried in Thy work ?
 And not alone my soul, but body too
 Thy subtle sweetness sought, drawn nigh to Thee,
 Whose glorious spirit, dwells concealed in fire ;

In air and water, boundless ether, earth,
 Expanse of light Thou art; but lo! Thy slave
 Who still hath clung to thee, in darkness rolls,
 Expectant waiting for the blissful hour
 When on him Thou in grace and radiant light
 Mayst burst, and loose at last his being's bonds,
 And bid him join the happy band of saints
 Who round Thee dwell, their sacrifice performed,
 In Thine own court extolling aye Thy love.
 When helpless on the sea of birth I lay
 By billows broad of passions tossed about,
 My limbs caught in the vicious jaws of lust,
 O Wonder! I bethought me of Thy name
 Which straight my frame with rapture thrilled,

my mind

With longing great Thy mercy to deserve.
 My body, Siva! have I strove to make
 A temple fit for Thee; my whole life long
 Thy gracious Being have I glorified
 In thought and word and deed. My yearning soul
 Melts at Thy name ineffable with love.
 All hail! Thy praise I sing. My Master, hail!
 I long the false to leave and join Thy home.
 Vouchsafe to grant to me Thy grace divine,
 Have pity on my soul that pines for Thee."
 The old devotee in a trance sank down
 E'en at the foot of Mahadeva's sign.
 And He, Whose boundless sea of grace extends
 In tender mercy to His loving ones
 In affliction, soothing them like balm,
 Descended in a flood of softest light
 Upon his soul, to which this message dear
 Was gently whispered:

"WAKE MY son, Thy prayer
 That from thy soul proceeded has been heard;
 Let not the sacrilege thy soul perplex;
 For he that offers it is pure in heart
 And feels like thee a rapturous love for Me,
 Unlettered though he is, the woodmen's chief
 For Me his parents and his tribe forsook;
 And all his acts, though in thy sight they be
 But profanation, yet to Me are dear.
 What thought to him the sacred Writ's unknown?

Me has he known and with Me humbly walks.
 And in his soul the same devotion burns
 As does in thine, despite his ignorance.
 His worship may be crude, but not the form,
 Th' externals of the worship, do I prize;
 The spirit and the motive, these alone
 Are worth to Me. His instincts immature,
 His thoughts unuttered, and his fancies strange
 That baffled all attempts to clothe in words,
 His vague desires not once to acts reduced,
 His aspirations crude he failed to put
 E'en into prayers, and his purposes
 To e'en himself uncertain and unknown,
 These count with Me more than his work itself.
 The wonder of his love thou shalt behold
 This evening, when thou and he alike
 Shall gain from birth release and bliss supreme."
 There as the pious hermit lay entranced,
 He dreamed that down the circumambient air
 Floated a strain of thrilling melody
 Which ravished him, and that a snow-white hand
 As of an angel, clothed in glory, stretched
 To raise his soul to Siva's Paradise;
 And to his lips instinctively arose
 The sacred syllables he held so dear,
 Which mean "To Siva adoration, Om!"
 A radiant joy o'erspread his face and gave
 His limbs new life, new strength. He stirred, he rose,
 And with a heart that throbbed with gratitude
 For the sweet message he had just received,
 Went round the shrine as by the rules approved,
 Himself prostrated in adoring love,
 And with light steps went to his hermitage.
 Th' eventful moment came when by the will
 Of Siva, Tinnan's self-negating love
 Was to be proved and he a nobler name
 That shall endure while self-devotion's prized
 Higher than ceremonial purity,
 Was to acquire. The hermit breathless stood
 Not knowing what shall happen, when there came
 Young Tinnan with his usual load of flesh
 Which he before the image placed; and then
 As with the water in his mouth he held,

He near the image drew to wash it, lo!
 There slowly in a thin streak trickled down
 Blood from the right eye of the sacred sign.
 He stood aghast and then with fury raved
 That aught of beast or bird or impious man
 Should thus have dared his Master to injure.
 Meanwhile he saw the wound more copious bled;
 And in his anguish rolled he on the ground
 Racking his brain if aught that he could do
 Would staunch the flow of blood. He straight-
 way rose

And from the neighbouring jungle sought he out
 Some simples which he hastened to apply.
 Alas, in vain the wound but bled the more.
 And in despair the woodman threw himself
 Upon the ground, and thought and thought. At last
 It flashed on him that somewhere he heard
 That for an wounded eye another eye
 Was surest remedy. O how he leaped
 And danced and shouted! O what rapturous joy
 Coursed through his veins! Thrice blest was he
 When with his arrow scooped he out his eye
 And to the bleeding image it applied.
 For, miracle of miracles! at once
 The wound was closed and blood had ceased to flow,
 And in delirious transport sang he loud:
 "O Sire divine! O Gem beyond all price!
 O Honey! O well-ripened luscious Fruit!
 O Nectar! E'en to-day have I achieved
 My life's reward. Oh me, vile as I am,
 Hast Thou, O Light, girt with resplendent beams,
 Risen, and from my mind expelled this day
 The darkness of illusion. God of gods!
 This day Thy grace to me is manifest.
 Thou art my refuge; leave me not alone."
 Thus in the plenitude of joy he sang
 Nor felt he pain; for 'tis wise nature's law
 That pain not only ceases to be pain,
 When at love's instance voluntarily
 It is endured, but e'en in joy is drowned.
 He sang and danced, and when again he looked
 What was his sorrow and bewilderment
 To see blood oozing from the other eye!

Mysterious! But he knew what balm produced
 A stoppage instantaneous of the blood
 Which issued from Trinetra's eyes. He still
 Had one eye left, and O what better use
 For it existed than to make it serve
 His Master's purpose! Then, when he was blind,
 That he the fresh wound might with certitude
 Discover on the image, he put up
 Close to the bleeding eye his foot, and lo!
 His other eye to scoop out he prepared;
 When suddenly rang out the tremulous voice
 Of the recluse, who felt as if inspired.
 "Stay! brother, stay! for further sacrifice
 There is no need. Behold, the wound has healed,
 And blood has ceased to issue from the eye.
 Thy rare devotion and thy zealous love,
 Thy noble spirit of self-sacrifice
 Shall saints and seraphs chaunt from age to age.
 Kunnappa stay! The God of mercy calls,
 Behold His presence in the glorious sky."
 With that Kannappa's hand he grasped, and both
 Upon the image of their Master fell
 Entranced, and He whose boundless grace redeems
 His faithful servants, to His court in Heav'n
 Lifted their yearning souls with loving care.
 The setting sun a perfect glory shed
 Upon their apotheosis, and choirs
 Of angels chanted their beatitude.


K. G. SESHAI AIYAR.

DESIRE.

Deathless Desire, pallied with vague regret
 Passed slowly through the land with stately
 grace,
 Pausing at times she turned her shadowy face,
 And then tho' on her lofty brow was set
 Grief for the unattained, a brilliant light
 Shone from her dusky orbs, till all the night
 Glowed with the radiance of immortal Hope.
 And men, beholding Hope, looked up once more
 Forgetting all the past, each fast-closed door,
 And seeing in its place a widening scope
 Made for their feet by that great Queen, Desire,
 Set forth anew to conquer and aspire—
 Aspire in spite of pain and vain regret,
 Knowing Life's fullest meaning is not yet.

ADELINE MARY BANKS.

HOW WE GET MAUVE AND TYRIAN PURPLE.

 All knowledge, scientific knowledge, doubtless, holds the foremost place; and each science is so intimately connected with chemistry, that we think it may be fairly stated, that chemical science is the most important and most practical of all. A popular chemist has indeed asserted, that the civilisation and intellectual progress of a country might almost be measured by the quantity of sulphuric acid consumed in that country.

One of the finest and most extensive fields of chemical research and application, is met within the art of dyeing—an art which has been practised from the most remote periods of antiquity. It is, in fact, impossible to fix either the date of its origin or the place of its birth; all we know on this head is, that dyeing was practised with some skill by the ancient peoples of India, Persia, Syria, and Egypt. We have no clue to the processes they employed, for the Greeks and Romans, who learned and practised them likewise, have neglected to describe them. Among the moderns, we find this beautiful art flourishing first in Italy, as a consequence of the commercial relations established between the Venetians, the Genoese, and the eastern nations. The almost sudden development of the physical sciences at the latter part of the eighteenth century, exercised an immense influence upon the dyeing art, which, up to that time, had consisted of a collection of mysterious receipts and empirical practices, but which is now submitted to rational and scientific principles.

Discoveries of new colouring matters, and their application to dyeing, are being made every day. Some are, indeed, destined only to an ephemeral existence! Others, on the contrary, will survive for ages, and be mentioned by future historians as marks of immense industrial progress. To the latter category belong the aniline dye, extracted from coal, and the murexide dye, extracted from guano. The idea of extracting colouring matter

from coal might appear preposterous even to the professional scientific man himself, were not other transformations, equally marvellous, of almost every-day occurrence in that most wonderful of all workshops, the chemical laboratory. Let us take a rapid glance at the operations to which coal must be submitted in order to obtain from it aniline, the substance which, in certain circumstances, gives birth to those brilliant violet and red colours mauve, fuchsine, &c., which are now making such a revolution in the tinctorial world.

When coal is submitted to dry distillation in large closed retorts, many products are immediately obtained. First, and among the most important, the carburetted hydrogen gas which lights European streets, and which is distributed into the towns from the gasometers by iron pipes. Second, coke, which remains behind in the retort, and is used for a variety of purposes; and which burned hard, serves for the construction of the electrical apparatus called Bunsen's Battery. Third, water containing a certain amount of ammoniacal salts, which is consequently employed in agriculture, and to produce sulphate of ammonia, a most valuable salt. Fourth, the substance called *gas-tar*, which distils off out of the retorts. This is a semi-liquid product, of a very complex nature. It was so little known a few years since, that, in France, it was actually burned under the retorts to economise the other combustibles! Now, this gas-tar furnishes colouring matters of great value. To quote two French authors, who have written on this subject since the lucky discovery of Mr. Pekkin, of which we shall speak presently: "Coal has not yet been transformed into diamonds, but we can extract from it a violet colour equal in value to gold itself!"

Aniline, one of the most remarkable of organic compounds, is found in gas-tar. It is a colourless oily substance, which is obtained likewise by the action of potash upon indigo, and by various other methods practised only in the laboratory. It comports itself with chemical re-agents as an

alkaloid, such as quinine and strychnine, and resembles much, by its chemical nature, the substance called nicotine, a poisonous alkaloid extracted from tobacco. This interesting product was formerly studied by Professor Runge, Dr. Hoffman, Gerhardt, and many other chemists. It has been quite recently found in the vegetable world by Dr. Phipson, who has discovered it in some species of fungi (*boletus*) which becomes blue when they are cut open with a knife.

It would be too tiresome an operation to extract aniline directly from gas-tar, which only contains small quantities of it, and where it is mixed with a great variety of substances, such as ammonia, benzin, tolnin, phenic acid, leucolin, naphthalin, and some others less known. The tar is therefore submitted to distillation, and the result is a carbonaceous matter which remains in the retorts, and some volatile oils, known as coal-oils, which pass over into the recipient. These oils are of a very complex nature, and contain compounds which distil at different temperatures, so that, by a kind of fractional distillation, two varieties of them are obtained—namely, the “heavy oils” and the “light oils.” The former are principally employed for preserving railway sleepers and similar wooden constructions, on account of their powerfully antiseptic properties. They have also been found in the French hospitals to act beneficially in the treatment of ulcerated wounds; for this purpose, these black matters are mixed with gypsum, or chalk. The light oils, known commonly as coal-tar naphtha, consist of a mixture of benzin, tolnin, phenic acid, &c. They are distilled to obtain benzin, a liquid extensively used to dissolve gutta percha, to manufacture varnish, for dissolving greasy matters, and so cleansing tissues, clothes, and gloves; besides which, it is sometimes employed as a combustible for lamps.

Now, when nitric acid is added carefully to benzin, and the mixture distilled with proper precautions, a reddish liquid passes over. This is called nitro-benzin, and, when purified, appears as a

yellowish liquid with a delightfully fragrant odour like that of essence of bitter almonds, for which it is most economically substituted in perfumery; in the manufacture of scented soaps, and in confectionery. When nitro-benzin is acted upon by nascent hydrogen—which is effected when it is mixed with zinc filings and weak sulphuric acid—it is transformed into aniline, the colourless oily substance we described above; and when this aniline is oxidised by chromate of potash or any similar oxidising agent, it is transformed into one of the beautiful dyes which form the subject of this paper. A French chemist has stated that the relative value of this dye (mauve), and that of the coal whence it derives its origin, “may be readily appreciated when we assert that whilst the coal employed to obtain it would hardly sell at one farthing per pound, a similar weight of aniline dye is said to be worth sixty pounds to eighty pounds sterling!”

We are indebted to an English chemist, Mr. Perkin, for the discovery of the manipulations by which aniline is transformed into this precious dye. For this purpose, it is not necessary to take aniline in its pure state, and then oxidate it. Mr. Perkin took impure sulphate of aniline, such as is found in commerce, and mixed it with a certain quantity of bichromate of potash. The mixture was allowed to repose for some ten or twelve hours, when a blackish-looking powder was deposited. This was collected upon a filter, and washed with water. The powder thus obtained was dried at boiling water heat, and then digested with coal-tar naphtha, this liquid having the property of dissolving out of the powder a peculiar brown resinous substance which constantly accompanies it. The coal-tar naphtha dissolves out the brown substance without attacking the colouring matter. The latter is then dissolved in woodspirit, which solution, when evaporated in a waterbath, yields a new colouring matter in its pure state.

To dye stuffs of a purple or lilac colour (mauve), a strong dissolution of the colouring matter

(and in preference, an alcoholic solution) is added to a weak boiling solution of tartaric or oxalic acid, and the silk or cotton stuffs are plunged into this bath when cold. To dye woollen, it is more advantageous to boil it in the above-named liquid, with a little sulphate of iron, to wash it out, first with water, afterwards with soap.

The great merit of the aniline or mauve dye reposes in the beauty and permanency of the tints it imparts. Moreover, its power of coloration is so great that very slight quantities suffice to dye a considerable amount of material—in other terms, to give colour to a large number of vats.

Let us now turn to murexide, or the guano dye (majenta), which appears to be the identical colour known in history as the famous Tyrian purple. The ancients prepared it from certain species of shell-fish (mollusca), but their process has not come down to us. Murexide, which has recently been again introduced as a dye, stands a fair chance of never more disappearing. The substance called murexide was formerly discovered by an English chemist, Dr. Prout, and described by him under the name of *purpurate of ammonia*. It was called "Murexide" by Liebig and Woehler in their magnificent memoirs on the products derived from the decomposition of uric acid. But, strange to say, the progress of science has turned in favour of Dr. Prout's views, and we are told by modern chemists that *purpurate of ammonia* is its proper name.

To obtain murexide, or *purpurate of ammonia*, we must first procure uric acid. Now, the substances from which this acid is extracted in the laboratories are the excrements of serpents or of birds, especially guano, which is known to be rich in urate of ammonia. It is from guano alone that nearly all the uric acid furnished by commerce is obtained. To this end, guano is first digested with diluted hydrochloric acid; the insoluble matters are allowed to deposit, and the clear liquid decanted off. The acid dissolves carbonate and oxalate of ammonia, phosphates of lime and magnesia, &c., forming a liquid which is valuable as a

manure, or which may serve for preparing ammoniacal salts, phosphates, or oxalates. As this liquid is so valuable, the same quantity is applied of acid to several lots of guano, until the acid is nearly saturated, and will "dissolve out" no more salts. The insoluble residue, which contains all the uric acid, is washed with fresh quantities of warm hydrochloric acid and water, after which it is dried. This residue, then, contains uric acid mixed with a certain proportion of sand or clay. It may, however, be immediately employed to produce murexide.

When uric acid is acted upon by nitric acid, it gives birth to a host of very interesting compounds, which have been investigated by Prout, Liebig, and Woehler; and when uric acid, is dissolved in nitric acid and ammonia is added to the dissolution, a peculiarly striking purple body is deposited; this is the *purpurate of ammonia* (murexide) of Prout. It would be impossible here to describe all the numerous compounds derived from the white crystals of uric acid when they are submitted to the oxidising influence of nitric acid; the most important of them, however, is murexide. In practice, the latter is obtained by dissolving out the uric acid of the guano residue with nitric acid, and adding a certain amount of ammonia to the liquid, in small quantities at a time, to avoid any sudden rise of temperature. The whole is then slightly warmed, and, on cooling, deposits murexide in the crystalline state. It is, in this condition, a most remarkable substance, and when once seen, is never forgotten. It may be described as consisting of small quadrangular crystalline plates, which reflect light of a green metallic lustre, like the wing-cases of a golden beetle. Two of the prismatic sides of a single crystal of murexide reflect this green metallic light whilst the two others reflect only a dull brown light. When seen by transmitted light—in other terms, when looked through—these little crystals appear like so many garnets of the finest claret tint; when pulverised, they furnish a red powder, which,

under the burnisher, becomes of a brilliant metallic green. Murexide is very slightly soluble in water, but gives to that liquid a beautiful and most intense purple colour. In potash, it dissolves with a splendid blue colour; so that, by its optical properties alone, murexide may be looked upon as one of the most wonderful substances ever discovered.

In the dyer's hands, murexide has furnished brilliant carmine, purple, orange, and yellow tints, according to the mordant, or metallic salt, employed in conjunction with it. The best results have hitherto been obtained with salts of mercury, for carmine or purple tints, and with salts of zinc for orange or yellow dyes.

For instance, to dye silk of a purple hue, a solution of murexide and corrosive sublimate is mixed, the silk-stuffs are plunged into it, and stirred constantly. They slowly absorb the colour and are dyed of a lighter or darker tint, according to the strength of the bath, and the time they have remained immersed. With woollen, some difficulties have been experienced, on account of the reducing action the latter possesses with regard to murexide; to dye it purple, corrosive sublimate and oxalic acid are employed with the murexide, or sulphate of mercury and tartrate of potash and mercury. But with these mordants it is necessary to use some oxidising agent such as chlorine water or bleaching-powder. After the woollen has passed through these salts, it is dyed in a solution of murexide either pure, or to which some oxalate of soda has been added. Another method of dyeing with murexide, consists in plunging the tissues into a colourless dissolution of uric acid in nitric acid. They acquire a purple colour, when they are afterwards exposed to heat, and the colour is fixed by passing the stuffs through a bath of mercury or of zinc.

Murexide, it appears, is also capable of forming lakes, which are nearly insoluble in water, and which possess very vivid tints.

Such, then, is a slight history of two of the most remarkable substances ever introduced into the chemical world, whether we consider them as purely scientific curiosities, or as useful and important elements of industry. The latter was termed "murexide" by Liebig, from the name of the shell-fish murex, this mollusca being one of those supposed to have been employed in the production of the ancient Tyrian purple.

MISS EVA AUBREY.

HAS THE AGRICULTURAL INCOME OF MADRAS INCREASED?

IN considering the much-vexed problem of the increase or decrease in the material prosperity of the agricultural classes, there are two tests usually adopted, viz:—(1) whether the area actually under cultivation, or to use the language of the present day official reports, the "area cropped" has increased or decreased in proportion to the population and (2) whether the average produce per acre has increased or diminished. His Excellency the Viceroy professed to go by these tests in his budget speech and said:—

"There is one point, however, in these calculations, where we are upon very firm ground. In 1880 there were only 194 millions of acres under cultivation in India. There are now 217 millions or an increase in virtually the same ratio as the increase in population. This alone would tend to show that there can have been no diminution of agricultural income per head of the people. The case for increase results from the increased standards of yield between 1880 and 1898. Perhaps the earlier estimates were too low. That I cannot say. The fact remains that the 1880 figures showed a yield per acre of food crops in British India of 730 lbs; those of 1898 show a yield of 840 lbs. In some cases this will be due to improved cultivation, perhaps more frequently to extended irrigation. They are satisfactory so far as they go; for they show that the agricultural problem has not yet got the better of our rapidly increasing population."

Mr. Digby points out that the Viceroy's figures are wrong, that according to published returns 194 millions of acres were not cultivated in 1880 but in 1890-91, that the figures for 1880 and 1897-98 were respectively 182 millions and 196 millions of acres and that the area of cultivation has increased between 1880 and 1898 only by 13½ millions and not by 23 millions of acres as His Excellency told the public. If therefore the figures published by the Director-General of Statistics are to be relied upon, the area under cultivation has not increased "in virtually the same ratio as the increase in population," but has increased in a very much smaller ratio. It is not the purpose of this article to enter into the controversy between Mr. Digby and the Viceroy. But I wish to mention one point not taken into account by Mr. Digby himself. Survey and settlement have been going

on throughout British India during the 18 or 20 years that have been taken for the purpose of comparison. At the settlements not only have the rates of assessments been generally increased, but the revenue accounts have been altered by the substitution of the survey areas or areas of the ryots' holdings as measured at the survey in place of the old paimash areas appearing in the accounts. Now the survey department generally finds an excess in the area of the holdings which is mentioned in the settlement reports. In consequence of this survey excess, a nominal increase is shown in the figures kept and published after each settlement. Suppose, for instance, that this survey excess comes to 10 per cent in a particular district where the settlement has been introduced, and suppose that the returns for that district show an increase of cultivation by 13 per cent. in the year 1900 as compared with the year 1880, the real increase is not in the ratio of 100 : 113, but in the ratio of 110 : 113, 100 acres appearing in the statistics of the year 1880, being really equivalent to 110 acres according to the actual measurement of the survey officers and putas being given after the settlement for 110 acres for the same land which was shown as 100 acres in the previous pattas. If we take this factor of the survey excess into account, a great portion of the increase in the area of cultivation, whether it be 23 millions as asserted by the Viceroy or 13½ millions as deduced by Mr. Digby is purely nominal, and the increase in the cultivated area will appear to still greater disadvantage as compared with the increase in population. Another point that has to be noted is that the taking of the year 188 as the starting point for comparison cannot lead to the drawing of a fair conclusion as that year followed the great famine which caused a great decline in the cultivated area and in the ability of the ryot to cultivate his lands properly and raise a fair outturn.

With these preliminary observations, I propose to consider the position of affairs in our own Presidency of Madras; for, assuming that the

Viceroy's conclusions are correct for the whole of India taken together, it does not necessarily follow that the same conclusions hold for each province; for, the movement may be in a 'retrograde direction' in some provinces, whereas it is just possible that it is so 'distinctly in a forward' direction in others as to give on an average for the whole of India an increase of cultivation in proportion to the increase in population. In his "Progress of the Madras Presidency during the last forty years," Dewan Bahadur Srinivasa Raghaviengar gives at page XCVII of the appendix, the cultivated area of the ryotwari land in this Presidency excluding the districts of Malabar and South Canara for which figures are not available. During the years 1870-71, 1880-81 and 1889-90, the cultivated area was:

76 / 17,144,000 acres in the year 1870-71.
15,059,000 acres in the year 1880-81.
17,076,000 acres in the year 1889-90.

At the next page the Dewan Bahadur calculates the percentages which these figures give. He finds that the cultivated area decreased by 12 per cent. in 1880-81 as compared with 1870-71 which is accountable of course to the famine, but that even in the year 1889-90, ten years after the famine the area of cultivation had not gone up to the figure of 1870-71, but was 4 per cent less. But the population increased in this Presidency from 31,250,000 in 1871 to 35,631,000 in 1891 or by 14.02 per cent. We have thus a *decline in cultivation by 4 per cent. in 19 years without taking into account survey excess, as against an increase in population by 14.02 per cent. in 20 years*, according to official authority. Let us now see how the survey excess affects these calculations. At page XCIX, Mr. Srinivasaraghava Iyengar has given the following table to ascertain the survey excess:—

Districts.	Year in which the Settlement was introduced.	AREA IN THOUSANDS OF ACRES.		Percentage of Increase.
		Old accounts.	By survey.	
Ganjam ...	1878-79, 1879-80 and 1883-84.	281	336	20
Godavari ...	1862-63 and 1866-67	Not available.		
Kistna ...	1866-67 and 1873-74.	1,683	1,794	7
Nellore ...	1873-74 and 1874-75.	910	910	...
Cuddapah ...	1874-75 and 1877-83	1,162	1,259	8
Kurnool ...	1864-69, 1872-73, 1874-75 and 1877-78.	1,122	1,226	9
Chingleput ...	1875-76 and 1877-78	489	544	11
North Arcot ...	1883-86	627	706	13
Trichinopoly ...	1864-65	647	764	18
Madura (3 Taluks)	1885-88	503	544	8
Tinnevely ...	1873-78	1,299	1,397	7
Coimbatore ...	1878-82	2,193	2,336	7
Salem ...	1870-71 to 1873-74.	1,048	1,209	15
Total ...		11,964	13,025	8

The real percentage of increase given by the figures is 8·8 and not merely 8. In order to ascertain the percentage of increase since 1870-71, we have to eliminate the figures for Trichinopoly and a portion of Krishna and Kurnool. Eliminating the figures for Trichinopoly, we still get an increase of $8\frac{1}{2}$ per cent. We are not in a position to ascertain the figures for the portions of the other two districts. On the whole we shall perhaps not be far wrong if we take a survey excess of 8 per cent. over the acreage of 1870-71. Applying this corrective, the real area of cultivation in the year 1870-71 was 18,515,000 acres and not merely 17,144,000 acres and the decline in cultivation in 19 years was not merely, $\frac{1}{4}$ per cent, but very much greater, probably $\frac{1}{4}$ or $\frac{1}{5}$ per cent.

Let us now consider the situation since 1889-90. The latest Administration Report of the Madras Presidency, viz., that for the year 1899-1900, gives the area under cultivation for the year 1898-99,

but not separately for ryotwari, Inam and Zemin-dari lands as does the report for the year 1889-90. We have therefore to compare the total area of cultivation for the Presidency and not merely that of the ryotwari land. Making this comparison, we find that the net area cropped during the year 1898-99 was 24,511,162 acres against 23,797,036 acres in 1889-90, or increased by 3 per cent. in 9 years. I have no means of exactly ascertaining the survey excess, due to the introduction of settlement since 1889-90. But settlement has been introduced in several districts since that year and judging from a few reports that I have perused, there is no reason to take the survey excess as under 3 per cent. For instance in G. O. No. 697, dated 31st July 1893, I find it stated with regard to Tanjore, "in the whole district, there is an increase of 16 per cent. in dry, only 2 per cent. in wet and only 5 per cent. in dry and wet together." In G. O. No. 232, Revenue, dated 28th March 1894, it is stated that "the increase in respect of all the three taluks" (which form the ryotwari portion of the Vizagapatam District), "taken together is 21 per cent. in dry and 17 per cent. in wet." In G. O. No. 275 Revenue, dated 23rd April 1894, the survey excess for the South Arcot District is calculated at 3 per cent. It is therefore doubtful whether there has been any *real* increase in cultivation since 1889-90. Even if there is an increase, it cannot exceed or $11\frac{1}{2}$ per cent. allowing for survey excess, whereas, the population has increased from 35,631,000 in 1891 to 38,208,000 in 1901 or by $7\frac{1}{2}$ per cent. Altogether it seems to be within the mark to say that there has been no increase, if there has not been a decline, in the area of cultivation during the last generation in the Madras Presidency, whereas there has been an increase of population by over 22 per cent. during the same period.

In the last Administration Report for this Presidency I come across a statement to the effect that "compared with Fusly 1285, the year before the great famine of 1876-78, the occupied area showed

an increase of 2·50 million acres or 12·49 per cent. But the real increase, after allowing for the excess due to the introduction of revised survey areas and to the resumption of holdings of Inam lands, was only 1·82 million acres." This gives an increase of 9 per cent in 23 years. One becomes sceptical nowadays of the accuracy of general official statements when the details are not presented to the public view, especially after we see that even so exalted a personage as the Viceroy is not free from error in matters of statistics. We must also note that the passage in the administration report refers to *occupied area* and not to *cultivated area*. But taking the statement as accurate, let us see its full significance. The population in 1871 was 31½ millions. Allowing an increase at the rate of 1 per cent. per annum, which is a high percentage, in 5 years or in Fusly 1285, the population would have been 32½ millions. Take the population to have been only 38 millions in Fusly 1298, and we have a 9 per cent. increase in the occupied area as against an increase of 16 per cent. in population during the same period. Is not then Lord Curzon's statement that the area under cultivation has increased "in virtually the same ratio as the increase in population" an idle dream, a mere figment of the imagination, at least so far as this Presidency is concerned?

We have next to consider the question of increase of produce mentioned by the Viceroy. Here again it was not fair for His Excellency to have taken the year 1880 for comparison. That was a year succeeding the great famine. The ryots had lost their cattle in large numbers. They had lost several members of their families who could have helped them in their agricultural operations. They had lost the funds wherewith to procure manure for their fields. In these circumstances the yield of the year 1880 must have been far less than the normal yield. A proper comparison can be made only if a period is taken before the famine of 1876-78, and this the Viceroy

has not condescended to do. We must admit that there has been some increase in the yield in some places due to an increase in irrigation on account of the sinking of some wells, the repair of a few tanks or a work like the Periyar project. But on the other hand, the ryots have lost the facilities they enjoyed before for the grazing of cattle and the obtaining of manure, and repeated cultivation year after year without proper application of manure has tended to deteriorate the land and lessen the yield. This is the experience of agriculturists in this Presidency. Whether the increase in irrigation has been so great as to counterbalance the diminution in the yield due to deterioration in the soil and want of manure, seems at best doubtful. The Famine Commissioners of 1898 upon whom the Viceroy seems to have relied do not themselves appear to have had much faith in their calculations. At best one can only speculate in these matters. But an increase of 15 per cent. in the average yield per acre implied in the Viceroy's statement is certainly far too sanguine, even as compared with the year 1880. And if a pre-famine year, say 1870, is taken for comparison, even the official estimate of increase will have to go down very much. I have attempted to show that there has been no real increase, if there has not been a decline, in the acreage of cultivation since 1870. Even if there has been an increase in the average yield per acre by 15 per cent., still it is not enough to counterbalance the increase in the population by over 22 per cent. Tested by figures supplied and statements made under official auspices, we seem to be on 'firm ground' when we say that His Excellency's statement that "the movement is for the present distinctly in a forward, and not in a retrograde direction" is not true with regard to the Presidency of Madras and that our Presidency shows a tangible diminution in the agricultural income per head of the population as compared with a generation ago.

M. VENKATARAMAYYAR.

RECENT PROGRESS OF ARCHÆOLOGY IN SOUTHERN INDIA.*

AN admirably drawn up Catalogue of the Pre-historic Antiquities in the Madras Government Museum with a scholarly prefatory note followed up with wonderfully accurate illustrative plates, the result of Mr. Brucefoote's "labour of love," undertaken at the suggestion of Mr. Thurston, the indefatigable Superintendent of the Madras Museum, marks a distinct step of advance in South Indian Archæology researches. It sums up and gives shape to our accumulated knowledge of the purely *pre-historic* times and peoples of South India. Such a study as this has been undertaken now for the first time and the present volume shows that when done by a masterly hand as is responsible for this it is fruitful of the best results. It is a study of a difficult portion of Archæology proper, and the time, labour and patience that have been bestowed upon it by the author merits our best thanks. As the book is of more than ephemeral interest and places on permanent record the results of what may be called the author's life study of a subject whose elucidation forms the first chapter in the rational interpretation of South Indian History it is but meet that we should dwell upon it at some length.

The arrangement of the collection is primarily chronological and secondarily geographical. Chronologically three ages in the existence of the human race have to be recognised as represented by the specimens in the collection and these stand in the following order in their geological and ethnological relations :—

1st. The Palæolithic age or the age of stone implements prepared by chipping only to an edge or point stones of suitable size and great hardness by stones of convenient size.

2nd. The Neolithic age represented by implements and weapons, in much greater variety of form and

material, made by chipping and subsequently grinding and polishing suitably hard and tough stones by tools of stone. Also, arts of pottery and drilling stone and other hard materials had been discovered.

3rd. The Iron age in which iron entirely displaced stone; wheel-made pottery and metals other than iron had come into use and arts made great advances.

The collection shows that unlike in other parts of the world as Egypt, Western Asia, and Europe generally a copper or bronze age preceding the Iron age is quite problematic for South India. As to the sequence in time of the peoples living in the three ages, the geological evidence afforded by the formations in which the chipped stone implements of palæolithic type are found indicates especially in sections in Western India that a great gap, historically speaking, exists between the date of deposition of such formations and of the beds in, or on which the earliest traces of neolithic man are met with. The geological evidence in Southern India though less strikingly clear, points in the same direction. But between the neolithic and iron ages no gap in time exists, the people of the latter age being doubtless direct descendants of the former. Direct evidence on this point has been obtained by a study of a pre-historic dwelling sites in the Deccan, in which the two stages of civilization overlap, though none such has been traced distinctly in the case of the finds made in burial places as far as known at present.

Of the three sections of the collection the Palæolithic is numerically the smallest, though it contains a good number of choice specimens of several types of the chipped implements. The neolithic numbers more exhibits but contains very few high class specimens and so few indeed are they that the author selects only one of them for figuring among the plates. Remarking on this scantiness the author urges on the Government the organisation of a genuine pre-historic survey by a really competent specialist who should be a geologist and an osteolô-

* Catalogue of the Pre-historic Antiquities with 36 plates by R. Brucefoote F. G. S. Government Press, Madras.

gist as well a trained Archaeologist, not a mere Architectural Surveyor or a Sanskrit scholar. It seems to us that the author's anxiety to secure justice to pure *pre-historic* survey makes him unduly hard upon other branches or sections of archaeology which have been thus far pursued with no little success. Yet it must be confessed that the Government has till now done little or nothing in *that* matter. It is to be sincerely hoped that now at least it shall endeavour its best to do something in the direction suggested. Else the result, in one respect at least, seems to be fraught with the greatest danger. The pre-historic monuments are being destroyed by the combined action of the rapacity of the Waddars, the lapse of time, the effects of weather, the action of the plough and the trampling of cattle. But if such a survey is undertaken and honestly carried out we are assured it would be momentous in its results. It would clear up more than half of the difficulties of the South Indian Ethnologist and Historian. First, it would procure much larger data than yet exist as to the distribution over the southernmost districts of Peninsula of the palæolithic people whose remains in the shape of chipped stone implements have been found in so many localities in the Carnatic and on the Deccan plateau, imbedded in Pleistocene deposits. Secondly, it would help us to bridge over the great hiatus in time which now appears to exist between the South Indian Palæolithic man and Neolithic man. Thirdly, it would result in the finding of evidence as to the quarter from which the Dravidians entered the Peninsula—a question of very high ethnological interest. Lastly, it would enable us to answer the very important ethnological question: Were the Dravidian immigrants that settle in Southern India in a Neolithic stage of culture? Or must the polished stone people be considered as Pre-Dravidians? If the question be answered in the latter way, a fresh immigration must be postulated, by which the true Dravidians reached their present country. If the answer affirms the former proposition, the idea of a further immi-

gration may be dispensed with, for the early Iron people appear to be the direct descendants of the Neolithic tribes and the ancestors of the present inhabitants.

Coming now to the third chronological age we have a very interesting description of the South Indian Iron Age Man. The author bases his conclusions on a study of the figures represented on the lids surmounting tall jars which belong to the pottery of the age, which forms the bulk of the Breeks' collection, "the gem of the pre-historic series." Says the learned author: "Grotesque and downright ugly as are these figures, yet those representing men and women are extremely interesting from the light they throw upon the stage of civilisation their makers had attained to, for they illustrate the fashion of the garments as also of the ornaments they wore and of the arms or implements carried by them. The animals they had domesticated, those they chased, and others that they probably worshipped are all indicated. Many figures of their domestic animals especially their buffaloes and sheep, are decorated with gaunds and bells, and show much ornamentation which seems to indicate that they were painted over, a custom which yet prevails in many parts, and specially at the Pongal feast or (Tamil) New Year's day." Their domestic animals included the buffalo, whose horns they decorated, the cow, sheep, horse or pony, camel, elephant, dog, "cock-tailed," pig (?) and goat (?). Of wild animals they seem to have known the leopard, tiger, bear, bison, sambar, doe, monkey, jungle fowl, bustard, snakes, cobras, hamadryas and of necessity many others in which they took however too little interest for them to have been represented by the potters, or which, for some superstitious reasons they avoided as food sources. It is curious to note that many animals which one might have expected to see modelled, are unrepresented. Except the peacock, none of the birds which figure so largely in the later Hindu mythological sculptures occur among the figures. There are no hawks, eagles, vultures, parrots, or

swans nor any lizards, tortoises or fish, all of which are so frequently to be seen as carved decorations symbolical or commemorative of later times. Nothing further would appear to be necessary to prove that the caste system in which all the South Indian peoples are now inextricably bound up was non-existent amongst them in those days but that it was a later result of their gradual Aryanisation.

Of arms they seem to have possessed short handled axes, swords, daggers and maces. Spears were probably non-existent then, but with bows and arrows came into use in later times. They seem to have been naked even for the low country climate. Both men and women wore a headdress similar to the classic Phrygian cap. They wore necklaces, bracelets, armlets and anklets. Tattooing seems to have been prevalent even then, though the face was not marked by it. The women wore neither ringlets nor chignons. The men wore their beards clipped rather short, but they were apparently of *thick growth*—which would seem to indicate a Caucasian origin to them though, as Mr. Brucefoote says, “the modelling of heads and features is far too coarse and caricature-like to allow of any safe deductions as to the ethnological relations of the people represented.” As to the age of these people the author observes:—“There can be no doubt that the costumes of the people represented by the figurines is much more archaic than that of the Sanchi Tope people, which were worn more than two thousand years ago, and that fact of itself throws back the age of the figurines themselves probably many centuries and gives great probability to the assumption that the art of iron-smelting and working became known in India fully three thousand years ago, if not more. If so, the antiquity of the Neolithic remains, both implements and sites, may be regarded as in many cases very much higher.”

The most striking objects in the pottery series are tall jars, many storied cylinders, of varying diameter, with round or conical bases—fastened to rest upon pottery ring-stands, or to be stuck

into soft soil like the amphoræ of classical times. The tall jars are not the true funeral urns which are found lower down in the grave and are of different shape, being low flattish vessels in some of which were found the beautiful bronze vases and bowls which form the gems of the whole collection. The extreme elegance of the bronze vessels and the excellent ornamentation of the vase, for which three plates which amply repay perusal are devoted, leads the author to ascribe to them a Græco-Egyptian origin. But his subsequent suggestion connecting them with the Buddhist Sanchi people seems to be nearer the mark.

Other pottery articles include besides funeral urns, elaborately decorated, and tall-necked, many ringed, round-bottomed chatties and lotahs, one of which is rather notable because of the two conical protuberances “mamelons,” or “paps” shown on one side which recall the like decoration in parts of some of the owl-faced terra-cotta vases discovered by Schliemann in his fourth city of Ilios.

Genuine archæological survey of the sort that Mr. Brucefoote urges for in his volume has been achieved to a limited extent by the present Superintendent of the Madras Archæological Survey as is evidenced by his latest report which has been published by the Madras Government in the shape of a government order. It is a most interesting document. Its chief interest centres in the excavations made in Adichanallur, in the Tinnevely District, which seems to be “the most extensive and important pre-historic burial place as yet known in Madras.” Perhaps, the reference in the *Tinnevely District Manual* that “in the hill of Adichanallur, close to Srivaikuntam, are a large number of ancient sepulchral urns buried, of all sizes. They contain bones and excellent pottery, some in very good preservation” put Mr. Rea in the track of its thorough exploration. Any way he has in great measure redeemed his promise of last year. At his request the place was conserved and the archæological reserve now extends to slightly over 114 acres. It is a long piece of

high ground, lying north and south, on the south bank of the Tamaraparni river, with a small hill at the south end adjoining the river. The urns in this burial ground are about a thousand in an acre and are about six feet apart from each other and at from three to ten feet, or more below the surface. The total number of objects so far excavated is now 1842. They include many unique and curious objects in bronze, iron, pottery stones and bones. Seven pure gold oval-shaped ornaments known as *bhaju band* and worn by kings and warriors were excavated as also iron lamps, spears, beam rods, mamooties, swords, daggers, tridents, tripods, axes, arrows, sulams, hatchets, knives, reaping hook, spades &c. No implements or weapons in bronze were found. Those in this metal were either vessels of curious and varied shape or personal ornaments such as rings, bangles, and bracelets. Several of the bronzes have buffaloes with wide curved horns which have been identified by Mr. Sewell with the rock-carvings on some hills in the Bellary District which have similar representations.

Having regard to the importance of this new burial place Mr. Rea has done well in ascertaining what tradition has to say about it. It is stated that near it was a most extensive town; extending over two miles to the East which was devastated, and of the Pandians annihilated by hordes of Muhammadans—perhaps this was one of those places which the historians of the latter referred to when they wrote that they had “sent 30,000 infidels to Jahannam and left their bodies to the jackals and vultures not one alive.” But Mr. Rea thinks that though a Muhammadan invasion may have obliterated the town these remains must be ascribed to a somewhat earlier date. He says:

“From many observations that I have been able to make, this mode of burial appears to have been that adopted by the Pallavas and Pandians and other contemporary early South Indian races of lesser note. When the conquering Cholas completely overthrew these dynasties this mode of burial ceased. All evidence at present available

shows this to have been the case. Briefly, burial remains of this class are largely found all over the Pandya and Pallava countries, and in lesser number in more distant parts, to which the remnants of these people may have fled, on their complete dispersal by the Cholas. It required such a cataclysm to explain the complete cessation of this mode of burial in Southern India. The same is the case with excavated cave temples. No remains of either class left by the Cholas, are at present known.”

Mr. Rea ventures another suggestion. The identification of the site of Korkai, one of the early capitals of ancient Madura, has always been a matter of discussion among learned men. It has been by some thought to be Kilakarai on the Coromandel Coast opposite to the island of Rameswaram, though this view has been disputed on the ground that Korkai and Kilakarai are two distinct Tamil words and that Korkhoi is still in existence retaining its old name in the modern district of Madura. Mr. Sewell has stated that “the true site of Korkai appears to be the present village of Marangalam.” And here is Mr. Rea’s suggestion which has the advantage of archaeological evidence in support of it:

“Dr. Caldwell has found that the present small village of Korkai was the site of the ancient sea-port of that name; but, beyond fragments of pottery and porcelain (comparatively modern) on the surface there is at present not the slightest visible indication of its having been an extensive ancient city. Had it been so, some structural remains would have undoubtedly existed even up to the present time. This is a too often neglected essential in the supposed identification of an ancient site. The suggestion I would make is, that the site at, and near Adichanallur, has most undoubtedly been a very large town, existing from a remote date. It is on the banks of the river Tamaraparni, near the mouth of which was Korkai, and here may have been the mediæval emporium, of which Korkai was simply the exporting seaport.”

We hope that the excavations will be unremittingly continued from year to year until the whole site is thoroughly explored and a general report issued embodying the results obtained therefrom.

C. HAYAVADANA RAO.

The World of Books.

MAKERS OF THE NINETEENTH CENTURY. By *Richard A. Armstrong, B. A.* (London. T. Fisher Unwin.)

This volume affords a good deal of inspiring study. The author has gathered in it 13 pulpit addresses given in the ordinary course of his ministry on Sunday evenings. Mr. Armstrong has modestly stated that his book is not intended for the critic or the widely read, but to the average thoughtful man or woman. Thomas Carlyle, the preacher, Charles Darwin, the man of science, William Ewart Gladstone, the Statesman, George Eliot, the Novelist, Henrik Ibsen, the Dramatist, Matthew Arnold, the Critic, Charles Bradlaugh, the Iconoclast, George Frederic Watts, the Painter, Giuseppe Mazzini, the Patriot, Queen Victoria, the Monarch, John Henry Newman, the Ecclesiastic, Arthur Penryhn Stanley, the Broad Churchman, James Martineau the Prophet Philosopher, these thirteen personages have been the subjects of Mr. Armstrong's Sunday discourses. He says these thirteen whom he has called "Nineteenth Century Makers" have had for him some special interest either by the influence of their characters or writings on his own thought and life or by some personal conduct. He does not for a moment suggest that the thirteen mentioned above have been the supreme makers of our age. In the imagination of many, a host of others, statesmen, reformers, thinkers, writers may rise up but the author has been content to discuss one representative of each of his thirteen types and we may unhesitatingly say that his discourses will amply repay perusal. It would be seen from the list of great men and women about whom Mr. Armstrong has discoursed that his selection has not been characterised by bigotry and narrow prejudice. Indeed, the reader who peruses the paper on Darwin, George Eliot and Bradlaugh will be struck with his laudable catholicity. Speaking of the effects of Darwin's theory of Evolution, the author observes:

That orthodox Christian Church rests on the assumption that the one authoritative account of the origin of the world—of plants, of animals, of men—is given once for all in the opening paragraphs of the Book of Genesis. That is the foundation. All the vast structure of orthodox religion is built upon that basis. Take it away, and the whole structure totters. All its walls are shaken. All its parts lose their sure cohesion; and the Church is confronted with the tremendous task of building up a new cosmogony, a new theory of the make of the universe in which we live. The Copernican system of astronomy had long ago dealt a like blow at the credit of received theology. The geology of Lyell, a few years before the utterance of Darwin, had dealt another. But the blow which

Darwinism dealt was felt far more keenly, far more widely. It seemed to discredit Church and Bible, nay, to do away with the Living God himself. And the resistance offered to the new teaching was strenuous, determined, in many bewildered minds most honest and most earnest, in many others unscrupulous and bigoted to the last degree. But great is truth, and she will prevail; and the last forty years have seen the essential elements of Darwinism accepted by all educated men.

This is the relation of Darwinism to orthodox theology. What is its relation to pure religion? Here is Mr. Armstrong's answer:—

Why, we are beginning to see that it is a relation of no hostility whatever; at worst a relation of indifference, not touching it at all; at best the relation of a true ally and friend, making more glorious and wonderful the revelation of the Living God.

Mr. Armstrong does not stop here. He goes a step further and says that Darwinism, makes for us, who believe in God, the majestic reign of his Providence more wonderful and beautiful than the mind of man had before conceived.

If you ask Darwin's own position with regard to these transcendent themes, he would reply, "I am but a man of science of moderate ability, with little power of abstract thought. I only contribute certain facts and try to show how life has developed on the earth. Concerning God, I affirm not; I deny not. Take my facts and weld them as you will in the structure of your spiritual philosophy." I myself had a letter from him long ago in which he said that he had never been able to arrive at a full conviction of the reality of a personal God. Years after, in his *Life and Letters*, appeared notes and memoranda in which he made the same confession. But he intimated, and not without some sadness, that so immersed had his mind been in scientific observation, that the capacity of his early manhood to be moved by music and by poetry had failed him, and that sublime scenery had lost its power to make him conscious of a presence Divine, breathing through wood and glade.

And now from Darwin to George Eliot.

George Eliot teaches how the preparation for virtue or for crime, for heroic fidelity or for dastardly treachery is made in the attention which the mind gives to images of good or of evil long before the crisis of action arrives—so that it would almost seem that by long habit the image of good may become so pale and nerveless that when the time comes it cannot command us, the image of evil so full of colour and strength that when the time comes we cannot resist it.

The teaching is that the free action of our will—the field for the free action of conscience—is in the habitual attention we give through life to images divine and holy, or to images of greed or lust; and that if we fail to discipline ourselves well long before the hour of temptation, when the temptation comes our freedom will be gone, and we shall have no force at command to deliver ourselves out of the devil's hands. The teaching is: Practise the mind in contemplation of the pure, the good, the beautiful, the holy; if there be any virtue, if there be any praise, think on these things—hold back the mind with a grasp of iron from harbouring images of the contaminating, the base, the foul; so only when the path must suddenly be taken to the right or to the left will you

have any force to turn to the right and prefer the stony way to the flowery path of sin.

We pass on now to the author's estimate of Charles Bradlaugh. Mr. Armstrong begins by stating that the world needs Iconoclasts—image breakers—as well as reformers by milder methods.

The "sweet reasonableness" which Matthew Arnold recommended, but did not always practise, will not do all the reforming work which the progress of mankind requires. *The mellifluous flow of gentle speech* will not always arouse the sleepers or pick the sluggards to activity; and the *lava stream of a potent tongue* moved by a mighty indignation has its function also in the making of the better world.

Mr. Armstrong has great respect for Bradlaugh's heroic character.

To stand God and oneself against the world, that, indeed, calls for courage of no mean order. To be called fanatic, upbraided for heresies, mistrusted, misrepresented, hotly rebuked even by good men while others turn coldly from you, and old friendships are broken by the strain, even when your whole soul throbs with the conviction that God is with you, that is no light thing. But ah! what must it be when you have not that, when you believe in no God when earth is without Him and heaven is blank of Him, when you cannot refresh your panting soul with prayer—when it is just you, you alone, in a fatherless world, with all mankind against you to stand defiant, rebuked of all men, alone, alone, unaided, no, Unseen Friend in the silence of the night or the glare of the battling day?—just because you believe what you have to say is true and is for the helping of men surely that is a heroism before which our criticisms may well be hushed.

But the atheism of Bradlaugh is pure and sweet compared to the atheism of such as, bowing the knee to God and making profession of his worship, yet bring no living love of God into their conduct of life. The men who uphold ancient wrongs, who trample on human right, who set their faces as flint against all pleadings for a larger justice and a loftier mercy, do many of them utter the shibboleths of orthodoxy and are in good repute in the churches. But the atheist Bradlaugh walks into the kingdom of heaven a league in front of these: and the "well done good and faithful servant" greets the ear of such as he long before it reaches that of the man who, in the savour of orthodoxy, for a pretence made long prayers, or devoured the houses of widows or orphans, or gave title of mint and anise and cummin, neglecting the weightier matters of the law, justice and mercy and faith. It is a shame and a scandal to Christendom that if we are to name three who in this England in the nineteenth century have stood forth always and unflinchingly for truth, for righteousness, for justice, there spring to our lips among the most prominent the names of three men who profess no knowledge of God—John Stuart Mill, Charles Bradlaugh, and John Morley.

We regret within the limited space at our disposal we cannot refer to the author's estimate of the various other personages that form the subject of this volume. For that the reader must seek the book.

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THOUGHT-POWER: ITS CONTROL AND CULTURE. By Annie Besant. (*The Theosophical Publishing Society, London.*)

One of the most interesting of theosophical publications recently brought out by Mrs. Annie Besant is a book entitled "Thought-Power: Its Control and Culture." The book is meant to help the student to study his own nature, so far as its intellectual part is concerned. The contents of the book originally appeared as a series of papers in the pages of the *Theosophical Review* and these have now been compiled, partly re-written and edited, in the form of an interesting manual for the use of students. In this book Mrs. Besant has given a very clear exposition of a highly abstract and technical subject. Of course to an ordinary student there is much in it that may appear mystic; but an earnest student of psychology who brings to bear on his study the requisite amount of patience, perseverance and undivided attention will find much in it, that is helpful in the practical realisation of his thought-power, its control and culture. In the ten chapters into which the interesting manual is divided is compressed a mass of valuable instruction in regard to a complex subject that a student, trained to think wholly in Western lines of thought, can find in no other single book in English. The first chapter describes the "nature of thought," the second deals with "mind, the creator of illusion"; the third is devoted to explaining the *rationale* of "thought transference," a subject which, as Mrs. Besant remarks, "almost every one now-a-days is anxious to practice and dreams of the delights of communicating with an absent friend without the assistance of telegraph or post." The fourth chapter deals with "the beginnings of thought"; the fifth with "memory"; the sixth with "the growth of thought"; the seventh with "concentration"; the eighth with "obstacles to concentration." The ninth and tenth chapters are perhaps the most interesting and useful, because Mrs. Besant here gives some practical suggestions and hints by means of which readers of this book can turn their thought-power to practical account in their daily life. Mrs. Besant concludes her useful manual with the following exhortation which takes the form of "after word" to the book:—

"Thus we may learn to utilise these great forces that lie within all, and to utilise them to the best possible effect. As we use them they will grow, until, with surprise and delight, we shall find how great a power of service we possess. Let it be remembered that we are continually using

these powers, unconsciously, spasmodically, feebly affecting ever for good or ill all who surround our path in life. It is here sought to induce the reader to use these same forces consciously, steadily, and strongly. We cannot help thinking, to some extent, however weak they may be, the thought-currents we generate. We must affect those around us, whether we will or not; the only question we have to decide is whether we will do it beneficially or mischievously, feebly or strongly, drifting or of set purpose. We cannot help the thoughts of others touching our minds, we can only choose which we will receive, which reject. We must affect and be affected; but we may affect others for their benefit or their injury, we may be affected by the good or by the evil. Here lies our choice, a choice momentous for ourselves and for the world."

"Choose well, for your choice
Is brief and yet endless."

Mrs. Annie Besant has by this and her numerous other writings on theosophy, Hindu religion and philosophy, done a service to the community at large for which they cannot be too grateful to her. Since her accession to the Theosophical Society she has turned the full blaze of her knowledge of Western science on the teachings of Eastern religions and philosophy and justified them in the eyes of Western science.

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KNOWLEDGE DIARY AND SCIENTIFIC HAND-BOOK FOR 1902.

(Knowledge Office: High Holborn, London.)

The publishers of this Diary have given such useful information that almost every one who takes an interest in matters scientific will find it profitable to keep it always before him. It contains descriptive articles on the observation of Comets and Meteors, suggestions as to how to use an Equatorial Telescope, the Microscope and its uses; aids to Field Botany; Hints on Meteorology and monthly astronomical Ephemeris. The paths of the principal planets for the year are illustrated with charts. It also contains various astronomical notes and tables with an account of the celestial phenomena of the year and 12 star maps showing the night sky for every month in the year with a full descriptive account of the visible constellations and principal stars. We have also a calendar of notable scientific events and an obituary for the year.

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HAND-BOOK OF PUBLIC HEALTH

(Evanl S. Livingstone, Edinburgh.)

The 'Hand-book of Public Health' by Dr. John Orr of Edinburgh, is stated by the author in his preface to be intended for medical students preparing for their qualifying examinations, and is in no way meant to be a full text-book on the subject of Hygiene. These 231 pages contain a good deal of useful information, but many statements appear, which, to say the least of it, are open to question. The whole book conveys the impression that it is not the work of one who is a public health official, and extracts from well-known text-books frequently meet the eye.

In the section on 'soil' on page 3, the author talks of the miasma of malaria rising in the ground air, and on page 8, his remarks on malaria in relation to the soil might have done him credit 10 years ago, but to-day suggest that he has not perused recent literature with great zest. Nor do they altogether coincide with the description in the section on 'Communicable Diseases' which is far more accurate. On page 14, the view taken of the ways in which plague spreads is according to the present state of knowledge scarcely correct. In describing a sand filter, the 'slimy layer' on which so much stress is usually laid is not even mentioned, and domestic filters are merely tabulated, while their good and bad points are not clearly brought out. The Berkefeld filter does not find a place in the list at all.

On page 83, malarial parasites are alluded to as if commonly found in water, and in other places the wind is credited with the ability of transporting them for miles on dust, both of which views have no foundation on fact. We are afraid the book will not meet the requirements of the Indian student.

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THE CRIME OF THE CRYSTAL. By Fergus Hume. (Geo. Bell's Colonial Edition.)

This interesting detective story centres round the personality of a young lady—Letty Hope—and a crystal ball which has the power of revealing the hidden actions of men. The narrative of Letty's adventures, of her love affairs and of her success at last, are well depicted and there is absent throughout the story that long-drawn-out horror that detective tales seem bound to excite in the reader. The characters are full of freshness and individuality; the pages teem with vitality, and an air of wholesome humour vibrates often. A pleasing story full of charm and interest, and out of the common run of detective tales.

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SPEECHES OF OLIVER CROMWELL, 1644-1658. *Collected and Edited by Charles L. Stainer, M. A., Christ Church, Oxford. Crown 8vo. cloth, with a Portrait. (Henry Frowde, Oxford University Press. 6s.)*

Those that believe that full justice has not been done to Oliver Cromwell will welcome the publication of this collection of the speeches of the Lord Protector. Owing to the poverty of historical records, various theories of Cromwell's early career have been advanced from time to time. Attention has always been devoted only to the last few years of his life. But Cromwell's activity extends from 1629 to 1658, a fact which should not altogether be ignored, says Mr. Stainer, simply because the historical material at our disposal is scanty. For this reason, a beginning has been made with the year 1644, a date that should serve to remind readers of how much must be missing, for Cromwell surely took some part in the long constitutional debates that preceded the outbreak of the Civil War. Hence the editor of this book has included the "substance" of a large number of speeches. This has been done with a view to give greater continuity to the book, and to enable the reader to form a more general estimate of Cromwell's speech making. There has been recently a good deal of useful literature regarding Cromwell. The publication of these speeches is certainly a good addition to it.

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ROBINSON CRUSOE. (*Blackie and Sons, London and Bombay.*)

"The Life and Surprising Adventures of Robinson Crusoe" by Daniel Defoe, is a welcome addition to Messrs. Blackie's well-known series of "Famous Books for Boys and Girls." In this edition of the first part of Robinson Crusoe, the text of the original has been carefully followed, and no attempt has been made to polish the strong unstudied diction of the author, or to improve his homely vigorous language. In only a few instances has the original text been departed from and the alterations are so slight and unimportant as hardly to form actual departures from the original text, and the present edition is claimed to be a faithful reproduction of the original. A few brief footnotes are also given and they serve to explain several obscure expressions and obsolete words. The book is well-printed and well bound and has an excellent frontispiece.

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GENERAL GEOGRAPHY FOR INDIAN SCHOOLS. *By W. H. Arden Wood, B. A. F. C. S., Principal of La Martiniere College, Calcutta. (Messrs. Macmillan & Co., London, Bombay and Calcutta.) Price Rs. 2-8.*

Messrs. Macmillan have always been on the alert to supply the student population in India with a number of useful publications. Their latest book, "A General Geography for Indian Schools" adds to their reputation in the line. This book has been written for the use of schools in India. Its object is to give, as lucidly as possible, the essentials of general geography with special reference to India and the British Empire. One important feature of this book is the special attention devoted to commercial geography. The study of this interesting branch of knowledge has unfortunately, like many other useful subjects, been regarded merely as an exercise for the memory. For sometime past there has been a recognition of the fact, among educationists in this country, that every effort should be made to make geography a subject of living interest, by associating facts with the reasons for them and names with something to justify their mention. Mr. Arden Wood's book will, we are sure, justify the expectations of schoolmasters. This book of about 510 pages contains a lot of useful information and if the publishers would soon add a complete and comprehensive index to the book, we have no doubt it will be sought by those other than students for whom it seems to have been specially designed.

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Books Received.

CHATTO AND WINDUS.

The records of Vincent Trill, by Dick Donovan.

GEORGE BELL AND SONS.

Maasssch, a romance of Transylvania, by Dr. Maurus.
Jokai.

King Fritz's A. D. O., by Frank Hird.

V. R. I., by His Grace the Duke of Argyll. K. T.

MACMILLAN & CO.

Marietta, a maid of Venice, by F. Marion Crawford.

St. Nazarius, by A. C. Farquharson, London.

The Youngest Girl in the School, by Evelyn Sharp.

The Firebrand, by S. R. Crockett. (Colonial Library).

K. B. BASU, GREY STREET, CALCUTTA.

Memoirs of Maharaja Nubkissen Bahadur,
by N. N. Ghose.

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Topics from Periodicals.

GENESIS OF THE KORAN.

In the *Metaphysical Magazine* for the month of December there is a learned paper on the "Genesis of the Koran" contributed by Dr. Alexander Wilder. In the course of his article the writer gives an excellent account of the life of Mahomed, the Prophet and of the teachings of the Koran, the Bible of the Mahomedans.

Dr. Wilder gives a very interesting description of the condition of affairs in Arabia about the time of Mahomed's birth and then follows it up with a short history of the life of the Prophet. Very early in life Mahomed lost his parents and was taken care of first by his grandfather and then by his uncle. He grew up into a young man travelling for trade through Syria where he was said to have become indoctrinated in the tenets of the Nestorians, acquiring the same hatred of image-worship which was a peculiarity of their religion. Mahomed as a young man was ever sober, thoughtful and industrious; gentle, sensible, free from hate, sincere and kind of heart. In matters of daily life he was inexpert and unpractical, but he excelled in imagination, delicacy and refinement of feeling. He lived long in obscurity before he began his work. When about 25 years old he married Khadija, a rich widow who was by many years his senior in age, and his devotion to her never abated.

There was at this period a goodly number of thoughtful men at Mekka and other places in the neighbourhood who had lost all regard for the established worship and yet questioned the integrity of the other faiths then prevalent in Arabia. They were generally careful to avoid open rupture with their countrymen, and sometimes assumed the title of "Abrahamitic Sabians," as though seeking to perfect the religion of their countrymen by finding and restoring that of their Great Ancestor. To this they gave the name of "Islam," obtaining for themselves as its followers, and perhaps for own worthiness the designation of *Musalman*s or Moslems. They were distinguished by their countrymen by the less honourable title of *Hanifs* as being apostates or hypocritical conformists to the national worship.

Four of these earliest "hypocritical conformists to the national worship" left their country in search of truth elsewhere. Each went by himself. Zaid, one of the four, stood apart from all, declaring his belief in Islam alone. He courageously affirmed his belief in one God, that "there is no God but Allah."

Mahomed openly declared himself the pupil of Zaid. Following his example, he repaired often to Mount Hira, a desolate peak near Mekka, and abode there for considerable periods, in one of its caves, engaged in silent prayer and meditation. He continued to do this for

several years. Though of a fervid imagination, he does not appear to have contemplated any taking of the lead in a general social and religious upheaval. He was undergoing a training and experience which served to prepare him for the very undertaking which he did not dream of or even comprehend. Mahomed was now forty years old. The annual fast of the month of Ramadhan was celebrated at Mekka, and he had gone to Mount Hira to spend the time in devotional meditation. This was the turning-point of his career. He had an interview with the angel, Gabriel, he tells us, and received from him the divine message commissioning him as the Apostle of Allah, the one only God.

"Mahomed is described as reluctant, and even afraid, to venture upon his new vocation. Timid and hesitating in disposition, he quailed at an enterprise which was sure to cost friends, reputation and what man holds dear." Finally he made up his mind to obey the supernatural voice. It does not appear to have been his ambition to introduce a new system of belief into the world. "His first and ruling idea" in the words of Professor Draper "was simply religious reform to overthrow Arabian idolatry and put an end to the wild enthusiasm of Christianity." Mahomed had of course never contemplated that the movement should extend into other regions as is now the case. His utterances were denominated the Koran, which term is derived from the word *K'ra*, to call, to cry out, to read as from writing. The name Koran, says Dr. Wilder, may therefore signify "the writings that were culled together or collected after the death of Mahomed or that were to be considered as Sacred."

Of the Koran Dr. Wilder proceeds to observe further:—

It is unique, having neither beginning, middle nor end. The *suras* are not even properly arranged. Its transitions from one mood and topic to another are sudden and rapid; it suffers fearfully by translation; its elegance of diction is utterly lost; and yet as we read, we find much to admire.

Yet, with all the faults in the arranging of its parts, despite the fact that it was written in *suras* at different times and at various exigencies, the Koran is uniform in its utterance, its elegance of language, its persistent purpose. Its supreme thought appears constantly in the emphatic words: "Allahu akbar," God is great. Every chapter is prefixed with the reverent expression "Bismilla," in the name of God.

"The laws of practical ethics in the Koran rest largely upon the principle of justice," says Mary Mills Patrick; "but charity, philanthropy, generosity, gratitude and sincerity are also recommended. Strict honesty is demanded in business dealings with just balances, and upright intentions. Lies of all kinds are condemned, the taking of bribes is strictly forbidden, and faithfulness to trusts is commanded. This is especially the case in regard to orphans."

LORD MORRIS.

The *Law Magazine and Review* for November contains a touching sketch of the life of Lord Morris who is lately dead. The writer, Mr. Richard J. Kelly, briefly depicts the views and work of this striking personality and recounts his professional and other success in life. Michael Morris was born in November 1826. He was educated at the Erasmus Smith School in Galway and from it entered the Trinity College in 1842, where he had a distinguished career, and graduated in 1846 as First Senior Moderator in Ethics and Logic. He was called to the Irish Bar in 1849, at which he enjoyed considerable practice. His shrewd common-sense and clear-sightedness soon brought him into prominence and popularity, and in 1857 the Government of the day made him Recorder of Galway, a post which he filled until he entered Parliament in 1865. After a brief but eventful Parliamentary life, he commenced his eminent career on the Bench. Mr. Kelly well says of him:—

As a judge he was characterised by moderation, clearness, and the vigour and soundness of his views. He had a thorough knowledge of the principles and practice of the law, the highest moral courage, unswerving rectitude, and great common-sense,—which are at the least valuable qualifications in the administration of justice. He devoted himself to his duties with extreme assiduity; and for rapidity and breadth of judgment, astuteness and penetration, fairness and firmness, he could not well be surpassed. He had before his elevation gained a name as a cross-examiner, and the gift which he undoubtedly possessed of worming out the important facts of a complicated case he turned to the greatest advantage as a judge. A jury felt always safe in his hands. The common-sense view always prevailed with him and he was able to measure the probabilities of a case or the credibility of a witness better than most lawyers of his time.

He was judge till 1889. On his arrival in London, an unprecedented honor was paid to him by the Benchers of the Lincoln's Inn and one he greatly appreciated:—

They waived the ordinary rule, never before broken except for the complimentary admission of royal and princely personages, and elected him a Bencher of the Inn though he had never been called to the English Bar.

From the first Lord Morris took a keen interest in the political affairs of the day and cut a considerable figure in the public life of his time, acting, according to his views, a friendly part to his native land. He said he had been listening to talk about the "prosperity of Ireland," as long as he could remember—for over sixty years—and he would add:—

"When I see the true state of affairs in Ireland and hear of all these panaceas, I am only reminded of the veterinary surgeon's bill on which was entered the item—'to curing your honour's horse till it died.'"

He was a strong Unionist and the illustration he used in order to show his objection to dissolving partnership with England is never to be forgotten:—

"Here we are, the partners in a great concern like Guinness's Brewery, with one hand in the till, and nothing will satisfy us but to go and set up a little shebeen of our own."

With such views, he was no admirer of Mr. Gladstone and his Irish Policy, and when some one, with whom he was conversing, described that statesman as a heaven-born genius, he is said to have observed that he "devoutly hoped it would be a long time before heaven was in an interesting condition again."

Yet he was no thick and thin admirer of the government of Ireland and could be scornful of English political rule and interference, as is shown in his celebrated explanation of the cause of the Irish question which his friend Lord Randolph Churchill once quoted with such effect in the House of Commons. "It's the case, you see," he said, "of a very stupid people endeavouring to govern a very clever people against their will, and there will always be a little difficulty about that."

He distrusted democratic institutions particularly as applied to an imperfectly developed country like England. He was not against change but against always changing. The truth is he was not only a real conservative in politics but also a good deal of a pessimist. Lord Morris is described to be an Irishman, richly endowed with the happiest characteristics of his race. His strong and unique character combined with his rare buoyancy of spirit, his great abilities, his knowledge of human nature in particular, his versatility, his rich and racy humour, droll sayings, and ready repartee; his absolutely spontaneous wit flashing forth on the slightest provocation or simplest occasion, and his fine native natural way, to say nothing of the brogue, made him one of the most attractive and popular personalities of the day. And to these qualities were added his typical Celtic nature:—

So plain and hearty, and yet so capable, when the occasion demanded it, of assuming an air of impressive solemnity and concealing the mercenary temperament beneath a truly judicial bearing. Withal so lively and genial:

And those who were intimately acquainted with him knew of yet another contradiction in this Celtic nature. They knew that,

beneath a rugged exterior and a certain roughness and intolerance of manner and speech there was a heart as tender, as kindly, and as loyal as ever man had.

EAST AND WEST.

Mrs. Besant contributes to the *Theosophical Review* for December a short but very thoughtful paper on the much-discussed question of Eastern and Western ideals. She says her remarks are chiefly intended to disabuse the minds of some Theosophists of some misconceptions of her views on the subject. The general reader can, however, with profit read Mrs. Besant's contribution. She lays down three fundamental principles which, according to her, ought to govern all sound opinions on all national ideals. (1) No past condition of a nation can be reproduced, for, a nation cannot retread the path along which it has evolved. Principles can be re-established but the application of them must be adapted to the new environment (2) A national ideal to be useful must be in harmony with the national character and must grow out of the national past. It must be a native of the soil not an exotic. (3) Every nation has its own line of evolution and any attempt to make it follow the line of evolution of another nation would be disastrous, could it be successful; but as a matter of fact, any such attempt is fore-advanced to failure because it clashes with the world-plan. What then is this world-plan? Mrs. Besant briefly states it: "The world exists for the evolution of the soul and for this evolution varieties of experience are necessary. Races subserve families, nations, like the two sexes, subserve evolution by their differences and offer the variety of soil and culture which brings out the varied capacities of the soul. If they were reduced to a dull uniformity, their value as classes in the school wherein the soul is educated would be lost and the soul would have one quality over-developed and another undeveloped." With these three main principles in view he who applies himself to the task of shaping the public opinion of any nation, should saturate himself with the past of that nation, distinguish clearly between root principles and their passing manifestations, identify himself in thought and feeling with that nation, and hold up before it the ideal which will appeal to all that is best in the national feeling, and verify and strengthen all that is noblest in the national intelligence. The reformer who seeks to supply defects, to lop off excrescences, must not forget the fact that no act of his should tend to change the particular type of his people. He must on the other hand try to evolve that type to its highest possible expression. At the same time lest people may misinterpret or misunderstand the real significance of Mrs. Besant's desire to preserve national ideals, she is careful to point out that in weaving out ideals it is not at all

suggested that the exact conditions of the past should be reproduced but that "the nation, recognizing the principles which underlay a period of greatness and the neglect of which accompanied its decay, may revive those principles and give them such new expression as the circumstances of the time demand." There has been a great deal of misunderstanding as to the real meaning of Mrs. Besant's work and the following statement of hers will once for all remove such misapprehension. "We do not want Westerners to adopt Eastern ideals but merely to learn from them anything they have of use and weave that in suitable form into their own type. And so we want Indians not to adopt Western ideals, but to learn similarly whatever is useful in them and weave it into their own type. Our idea is not to make the Englishman a fifth-rate Indian or the Indian a fifth-rate Englishman; but that each should maintain his own essential type, enriched but not transformed, by what each may learn from each."

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BONDS OF EMPIRE.

This is the title of a nice little poem, by the Hon. Mr. C. L. Tupper, C.S.I. which appears in the current number of *The Imperial and Asiatic Quarterly Review*.

To bind men close there are three ties
In that great Empire whose behest
Is owned by millions East and West,
And in far Southern Colonies.
One is—to jointly fight with wrong
And folly, in the sacred cause
Of justice and well-ordered laws,
And all that makes an Empire strong.
Another is—to claim as friends,
Each aiding each, a band of those
Who battle with the self-same foes,
Unwearied, for the self-same ends.
And this the third—as life outruns
Its fresher youth, that we behold
The same supreme devotion mould
The aspirations of our sons.
Be this our watchword, big with fate
Of many peoples, many lands,
To English hearts and English hands—
Pass on the vigour of the State;
Which shall not fail while nations last,
If friends with friends, in zeal for right,
And sons with fathers, all unite
To keep the bonds of Empire fast.

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AMERICA.

The Hon. Charles Carroll Bonney, President of the World's Fair Auxiliary Congresses of 1893, contributes to the *December* number of *The Open Court* a long poem on America. It is a magnificent account of the birth of the New World and we should not grudge the space for 640 lines but for the fact that we should be doing an injustice to the proprietors of the *Open Court*. We content ourselves, however, with reproducing the concluding stanzas of the poem:—

Then from Europe came
To the New World Columbus had revealed,—
This wondrous land of promise and of hope,—
The White Man with his cultivated soul,
Learning and science, eloquence and art
To find new homes where with a freeman's hand,
And an unfettered conscience he might live
In a larger liberty, a higher life.

But then as if to prove that savagery,—
The lust of conquest, and the greed for gain,
Defile all races of our human-kind,
Alike barbarian and civilised,
The men to whom Columbus showed the way,
Filled Mexico with carnage, woe and wrong;
Peru with outrage, robbery, and grief,
And wrought destruction not to be described
In human language. Ah! how terrible
Is murderous war, in all its murderous forms!

Thousands of years ago, Humanity,
On eastern plains began her grand career,
Her march triumphal, westward round the world,
Each year, each century she has gone on,
Developing some new sublime idea:
Ascending in the scale of thought and truth:
Ennobling and untrammelling herself,
With each advance towards the setting sun.

Such was its destiny. The pale-faced race
Has driven the red warrior as he drove
From home and burial-place those who, ere him,
Peopled the lands of free America.
Fair is the White Man's future, but the race
Of the stern Indian bows to destiny,
And in its wasting desolation o'er
Moves slowly onward toward the deep abyss
Beyond the horizon where the Red Man's sun
Still lingers, shedding a faint radiance
Over the country he once called his home.

Filled with funeral gloom the aching heart,
Lifts up its eyes with longings for the light,
And turns again toward the morning's gates,
Then smiles to see the glory of the dawn

Descending to the valleys. Now the soul
Ascends the mountains for a larger view,
And soars above them till the continent
Before its vision like a picture shines.

How marvellous and beautiful the scene!
Fields, farms and gardens, cities, villages,
Imperial States, and Nations still more vast!
And in the heart of North America,
The Great Republic. Elsewhere on the earth,
Each people dwells apart, in its own land,
And holds its rights by arms and fortresses,
And strategy and battle. Not so here;
But in this wondrous land all races seem
To find a common ground of harmony,
And dwell together as should brethren dwell,
In unity and peace, with equal rights:

What means this miracle? How was it wrought?
The marvellous mystery is quickly told.
This is the Palestine of the New Age!
To its fair fields the voice of God hath called
From all the leading nations of the earth
The brightest of their children, here to build
A living temple of Free Government,
The last and greatest wonder of the world.

Here Liberty abides. Here Law and Faith,
And Equal Rights, and Justice hold their sway,
Except so far as some invading wrong
Breaks in and baffles them till put to flight
By the roused people whose resistless power,
The common welfare ever may invoke.
For in America the people rule,
And choose their Kings to serve them, not to reign.
Thus they who in their native lands had feared
Their neighbours as their foes still meet them here
As equals, and become their warmest friends.

Yet here in Freedom's Garden had been sown
The dragon's teeth of human slavery,
Breeding vast ills and bringing on at length
A trial of Free Government so fierce,
Prolonged and terrible that it was proof
To all the world that more than kingly power
May by self-government be held and used.
And thus has been assured throughout the earth
The final reign of Law and Liberty,
With sovereign Justice and Equality:
And by Co-operation, finally,
Such bounteous prosperity that all
May find supply of every righteous need,
By honest industry.

Then will the dream
Of Paradise Regained have been fulfilled!
Then, learning wisdom from the Prince of Peace,
The Nations will in Arbitration find
A better safeguard of their rights, than war;

And wealth and power their highest glory seek
 In the most faithful service of mankind.
 Thus do the hopes of human liberty—
 Free State, Free Church, free conscience and free
 thought;
 And equal rights, protection and defence;
 Laws mightier than armies, order firm
 And well-maintained without the bayonet;
 Rest on the Great Republic, and depend
 Upon the future of America.

And this high claim involves no disrespect
 Of elder nations, though their treasures
 Hold glories gathered through a thousand years,
 For the Republic is God's minister
 For human service, not a new device
 Of man for conquest and aggrandisement.
 So when the empires of the older world
 Salute the Great Republic, they confess
 Not the supremacy of other men,
 But the transcendent providence of God.

The eagle symbols His all conquering Truth,
 The stars a knowledge of His sacred Laws,
 The bands the bonds of Human Brotherhood:
 And the fair house the banner's folds display,
 The light and love of Unity and Peace!

Where'er these emblems tell of Liberty,
 And Law, and Justice, and Fraternity,
 And he who reverences, would name them all,
 He speaks the one grand word—America!

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THE ACQUISITIVE MAN.

In the course of a short article, a writer in the Christmas number of the *Canadian Magazine*, Mr. Xerxes, states the various ways in which man's acquisitiveness may express itself to make him successful in life—in business, in politics, in the professions. The writer draws the distinction between the acquisitive man and the so-called genius whose brilliance is in spots and whose ability spends itself "in gusts." Acquisitiveness! It is this virtue which gives man stability of purpose and does him the good that genius seldom can:—

The acquisitive man retires each night with something his that was not his when last he sought his couch—money, land, property in some form, a desirable acquaintance, a new business connection, a book, a knife, an idea, a cheer from an audience, a smile, a compliment with meaning in it, something, anything. No day is empty. He acquires not only material things, but aids to material things which others do not know the value of, and so he builds, brick on brick, the edifice of his fortune.

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LOVE AND MARRIAGE IN ITALY.

The *Chatquan* for December is an excellent number. Among other articles of interest is one on the subject of Love and Marriage in Italy by Lena Lindsay Pepper. The question of marriage no sooner occurs to the Italian girl than the *dot* or dowry is taken into consideration; on the size of this depends the choice of her husband. After the marriage *dot* is procured, there are many preliminaries that generally require two months before the great day.

First, the bans must be published and the birth certificate of both parties presented to the municipal councillors; then the "consensus" must be obtained. This is the general consent of the community in which the bride lives that the marriage may take place. The wedding festivities begin two weeks before the great day. The prospective bride and groom visit all their friends. Then there is another visit when the bride, with a train of relatives, goes about among her friends distributing the wedding favors—little white satin bags of candy with her own and her affianced's monogram stamped upon them in gilt letters or embroidered in silks. In return for this little favor a wedding present of from five to fifty lire is expected.

Courtship as carried on in Italy is assuming a more liberal character at least in the northern part of Italy, but in the more remote parts old traditions and customs prevail. The girls have a hard time:—

There is no going about, no mingling of the sexes. The entire courtship is conducted from the protection of a flower-embowered balcony that is too high to make possible any escape. Here they sit at certain hours in the day and gaze down at the passers-by, and when one goes by, whose eyes flash up at them a glance of admiration, there is a responsive wave of a fan, or a coquettish shrug of the shoulders. And thereafter the youth haunts that particular balcony. He serenades the fair one, she drops a flower at his feet, and the wooing goes on in a pantomimic fashion; the sidewalk and the balcony are too far apart for exchange of sentiment other than by gestures. However, gesture in Italy is frequently all-sufficient for a long and interesting conversation. In no other land, perhaps, can so much be told and understood by the sign language. To express affection the right hand is drawn slowly down the cheek to the chin; the slower the movement, the deeper and more intense the passion. Brushing the face lightly with a handkerchief is also an expression of love. Very frequently the entire courtship, engagement, and plans for marriage are conducted in this sign language, before the lovers have ever spoken a word together. The Italians are a passionate race, and when they fall in love it does not take long for the man and the maid to come to an understanding.

Perhaps no people are more devoted or sacrifice themselves more for their children than do the Italians, and it is this devotion that wins from the children such perfect obedience. Still there are instances where the children give their hearts without the parental sanction.

THE NATIONAL DEFENCE FORCES OF GREAT BRITAIN AND THE UNITED STATES.

In a recent number of the *United Service Magazine*, Sir Howard Vincent set forth the reasons for much which has puzzled observers in the South African War. The volunteers of Great Britain are an Auxiliary Force of the Empire, primarily organised for home defence. The National Guard of the United States is composed of the organised militia of the several States, governed and maintained by the States, not the nation. The United States, however, pay 1,000,000s. per annum for its support. Writing of these two systems in the December number of the same journal, Mr. Charles Sidney Clark shows, by comparison, that the American system is distinctly superior in its working and in the results obtained. The advantages of the system prevailing in the United States (National Guard System) over that in vogue in Great Britain (Auxiliary Forces) are thus set forth:—

1st. That the Government does not have to deal with Reserves, Militia, Yeomanry, Volunteers, and Colonial Irregulars, but *one* force only—known as the National Guard in peace, the Volunteer Army in war.

2nd. That this force, or the skeleton of this force, is kept in a state of preparation by local Governments at all times. A similar system would be the maintenance of territorial regiments, in peace, by the counties of Great Britain.

3rd. That the system by which the Guard is called into Volunteer service is equitable, making each section of the country do its part, and convenient, because it imposes on local authorities and State staffs the greater portion of the work of preparation and mobilisation.

4th. That the system arouses local pride, and stimulates emulation between different sections, which, as Sir H. Vincent justly remarks, is greatly to be desired. The "territorial" idea has taken firm root in America.

5th. That while the Guard is composed of forty-five units, those units are practically uniform in drill, uniform, arms, organisation, and system. There are not "twenty-one patterns of head dresses," or an "endless variety of facings, button, cut etc." as in the Yeomanry or Volunteers of England, but one service uniform from one end of the United States to the other, whether the soldier is a Regular, Guard-man, or Volunteer.

6th. That every auxiliary organisation is provided with "a permanent depot," a permanent camp ground, and a permanent rifle range.

Many would be inclined to envy Mr. S. Sinha, Bar-at-law, Allahabad, the able editor of the *Kayastha Samachar*, for the position which enables him to offer his excellent monthly for the trifling annual subscription of Rs. 3. During the past two years the *Samachar* has been publishing several articles of local and imperial interest. We trust it will keep up its usual level of excellence.

REGULATION OF MARRIAGE.

The *Health* for December contains a summary of the paper recently read by Dr. E. T. Rulison on this subject. He gives a brief history of marriage and called attention to the Jewish canonical laws on the subject of the marriage contract. He shewed that to the care exercised in marriage is due the constant progress that this race has made and its pre-eminence, commercially, politically and intellectually. The law protects us against scarlet fever, diphtheria, and small-pox; why not, he asks, against ill-advised marriages, the results of which are almost as serious? Education has done nothing for us in this direction so far. Wealth and social position are important factors in making up the sum of human happiness, but how insignificant when compared with health!

"If we are to be left perfectly free to follow our own impulses, or ambitious promptings to attain wealth or social position through matrimony, regardless of physical consequences, then I can see no relief for the great majority of our people, but perpetual ill-health and misery.

In Brazil, it is said, there is a self-imposed law among the higher classes in relation to marriage. The man about to marry is compelled to furnish a certificate from one or more physicians to the effect that he is free from diseases of a certain character and from signs of diseases that could be transmitted to offspring. The physician consulted must testify that, as far as he can learn, the union is in accord with the laws of sanitation.

At a recent Women's Congress held in Paris resolutions were adopted to a similar effect. Dr. Rulison suggests that a medical staff be appointed to examine all boys and girls from twelve to fifteen years of age, relative to their physical condition and family history and that records be kept. He suggests three classes:

(a) Those being physically and mentally sound, of good habits, and having no history of hereditary disease for at least three preceding generations. (b) Those having the same qualifications but with a family history extending to the grandparents only. (c) All those not included in classes (a) and (b). No one should be allowed to marry outside of the class to which he or she belongs.

The *Mahratta*, the well-known weekly newspaper, at one time edited by Mr. B. G. Tilak and now by Mr. N. C. Kelkar B. A., LL. B., appears in an improved form, and we have 12 pages of foolscap matter guaranteed for a comparatively small subscription of Rs. 4 per annum. We wish the *Mahratta* a long and prosperous life.

COMMERCIAL MORALITY.

In the December number of the *Commonwealth*, the place of honour is given to an interesting contribution by the Rt. Hon. Sir Richard Fry. The article is headed "The sin that sticks close between buying and selling," and is in support of the Secret Commissions Bill recently introduced into Parliament by the Lord Chancellor. Though Sir Richard Fry's remarks are intended chiefly for the British reader, still there is a great deal in it which can with profit be read by people in India as well.

While accepting that in the commercial world there are many who are honest in themselves and many who are made honest by the force of legislation, he looks with dissatisfaction on the growing immorality in commerce which exists in several forms. Of these he specially dwells on bribery and other forms of secret payments which are characterised by two features:—

In the first place, they involve the attempt to serve two masters and secondly, they are secret. The latter, he says, is the greatest blot on the system. The law of every civilised country holds such payments unlawful. Often, in practice, a bribe is offered by the seller to the agent of the purchaser, whose favour the seller requires for the sale of his goods. Often also the bribe is demanded by the agent himself. But both are only different forms of the same corrupt practice tending ultimately to shut out the honest trader from dealings with a whole circle of firms.

Bribe is frequently covered under a variety of names. Under the honest-sounding name of discount, a percentage on a bill is often offered to a servant. Also bribe goes frequently under the name of a capitation fee, or covered in a Christmas box. The system of bribing in commerce is not only a moral evil but is also materially an evil. It lessens confidence between man and man, and thus checks the legitimate development of trade and manufactures. It works much mischief in the case of young men raw in business. If they have an aptitude for dishonesty, the temptation set forth by this system soon drives away conscience from them. If they are honest, they suffer in business. Mr. Fry cites the case of an English agent to a German firm dealing in printers' ink, who, when he was dismissed from the firm, brought an action against the firm in an English Court of Law. The plaintiff in his defence sets forth a picture of the system of corruption that obtains in commerce generally. Dilating upon the system of commissions, he says:—

"There is," said the man, "a system in the trade, and I am bound now to say it in my own defence—it is very seldom that we have to divulge these things—there is a system of what we call Commissions paid in our trade. I will illustrate it this way, the best I can. Whenever I go to a firm and ask them to give me their patronage, I must not go to the head of the firm, I have to go to the cash manager of the various departments: I may have to go to him for six months, yea, twelve months, and perhaps two years, constantly pegging away at him to get him to use his influence to give me the orders, outside those that are already receiving them. I have not only to see him, I have not only to feast him, but I have to give him money. It is what, for the want of a better term, I would choose to call Secret Service money." (The Lord Chief Justice: "Bribery, in fact.") "Well, bribery, my Lord; yes. Now, these sums of money can never be noted. If it got within the knowledge of any recipient of these sums of money that you ever charged them in a book with their name to it, you can depend upon it as long as they were in the trade you would be what we call boycotted. They take this money practically with their hands behind their backs, and with their eyes shut, and they do not know hardly who gives it to them. They surely will soon know how much it is, and they will let you know if it is not enough. Well, this is a state of iniquity that the trade has sunk into, and it would be impossible, even for the oldest firm, to try and knock it down, let alone a young and aspiring firm, as far as this country is concerned. It would . . . be madness on my part . . . to try and hoodwink this system out. It is grounded so deep into the system of the trade—in fact, I could not employ terms—I could traverse it if it was not wasting time . . . with illustrations that would make you blush, . . . that we are compelled to do . . ." (Lord Chief Justice: "Tell us what you said . . . about this iniquitous system.") Plaintiff: ". . . you know the system on which our trade is worked. I do not understand what you do in Germany . . . But in England, unless you spend your money freely, and exercise a large amount of faith, and ask no questions about it, you will stand very little chance of getting any business, and I illustrated it to them; even life-insurances have to be purchased, even villas have to be purchased. Villas upon villas are purchased to-day. It seems a strange and astonishing statement for me to make in an English Court of Justice . . . I am reluctantly compelled—in justification to myself. . . . It is a common thing for firms to buy villas and present them to managers of departments—life-assurances and all kinds of presents are given, and nothing is asked. . . . You may be astonished that a business of this character could stand such iniquitous practices, but . . . all round, there is a profit of something like 70 per cent. to 75 per cent. on the material. That they have to play upon, and if they can spend 50 per cent. of that in this particular process they have a clear trading profit of 25 per cent. which is not bad profit even in trade of that description.

He then gives a picture of how, in England, unless a man is prepared to spend his money freely and exercise a large amount of faith and asks no question about it, he stands very little chance in business. The only truthful and honest apology for such a system, if there is any apology at all, seems to be that "Everybody does it and I saw no harm in

it." A flimsy defence is made sometimes, that the gift was not intended to bias the recipient or that the recipient nevertheless did his duty faithfully to his master. While it is difficult to settle this question, it may be said that the system is to be condemned if in the least it diverts the action of the recipient in any way, however innocent may have been the intentions of the donor and however untainted may have remained the mind of the recipient.

If then co-operation is to be made wide and the socialistic or communistic ideas are to be realised at any time by the subordination of individualistic tendencies to altruistic ideas, the first thing required is the education of the community to adopt a higher standard of morality and good faith than now prevails. Else all the commercial schemes of any nation are destined to failure.

While Mr. Fry realises that the root of the evil is already very deep, he earnestly appeals to the wisdom of every individual either engaged in commerce or not, to do his best to bring ethics into trade by ensuring his servants in the garden or the kitchen from malpractices of this kind, or by forming Trades Unions to put down such pernicious systems or by introducing moral instruction in technical schools. Those who occupy positions of influence in the world of commerce, of politics, or of the church have a vast power for good in this matter. Besides, he expects much good to be wrought by the Secret Commissions Bill, which is now pending in Parliament, in the direction of washing away the "sin that sticketh close between buying and selling as a nail sticketh fast in the joinings of the stones."

We have received from Messrs. Dawbarn and Ward Ltd. (6, Farringdon Avenue, London) the first number of their new journal *The Woodworker*. As the name implies, the journal is one for woodworkers only, as the publishers propose to exclude all extraneous matter from its pages. The contents of the number before us are of interest to all stages of woodworkers, from the novice to the practical craftsman who seeks artistic designs to which to apply his manual skill and to the man who wishes to carry out his artistic conceptions on sound constructive lines. The journal is sure to be of use and interest to the amateur workers and to the professional.

WALTER SAVAGE LANDOR.

In the *Canadian Magazine* for December, a writer pleads for a better appreciation of the work of Landor, who was in many respects a remarkable figure in the literary life and activity of his age. (1775-1864) an unrivalled prose-writer and poet of great gifts. And yet, with all his accomplishments, Landor has failed to win the ear of the world, or to be known save, for the most part, through anthologies and treasuries of choice prose. His fame chiefly rests on his "Imaginary Conversations" between celebrated persons of ancient and modern times, which is a model of a pure English style:—

Besides the culture manifest in these writings and the evidences, on almost every page, of a marvellously wide and choice range of reading, one is struck also by their author's phenomenal power of character-sketching and the dramatic interest of much of the matter; while the volumes are here and there lit up by some piece of pungent satire and by frequent overflows of wit and humour.

He is the author of several other works.

So high an authority as Swinburne affirms:—

"He has won for himself such a double crown of glory in verse and in prose as has been won by no other Englishman but Milton."

And yet his toil met with no wider audience than that of a small circle of learned scholars, litterateurs and immediate friends. But Landor, to the close of his long career, was little affected by the lack of popular applause, as the following quatrain of his shows:—

"I strove with none, for none was worth my strife;
Nature I loved, and, next to Nature, Art!
I warmed both hands before the fire of life;
It sinks, and I am ready to depart."

What a new century may do for him, it would be idle to speculate upon.

A magazine which deserves to be better known in this part of our Presidency is the *Dawn*, a well-conducted monthly, edited by Babu Satish Chandra Mukerji, M.A., B.L. It is intended to be an organ of higher eastern and western thought and its subjects cover a wide field. The January number contains among other papers "Philosophy of the Gods," by Hirendra Nath Dutt, M.A., B.L., "How Hindu Orthodoxy has prevented from dying, and may yet revive Indian Arts and Industries" by Annoda Charan Mitra, "History of Indian Grammatical Literature," by Pandit Vidyabhushan.

DEPARTMENTAL NOTES.

Educational.

EDUCATION IN ANCIENT INDIA.

This was the subject of the annual address which Prof. M. Rangachariar, M. A. of the Presidency College delivered recently on the occasion of the Teachers' College Day, Saidapet.

The antiquity of ancient Indian learning, and its being unconcerned with secular culture and secular arts, is a feature not merely of the learning of ancient India but of the ancient learning of all lands and civilisations. There are many reasons to account for this isolated and unworldly character of ancient culture and thought. Ancient learning has always been in the hands of priests, and has naturally withdrawn itself as much as possible from secularism. Moreover, in early civilisations the learning over which the priest keeps guard is mainly considered to be the special and sacred property of the community and race to which he belongs. His sacred learning he is prohibited from imparting to others. In his hands learning has generally progressed and taken distinctive colour, the colour of other-worldliness. It may not be that we are to blame him for this. Taking all things into consideration, the ancient priest of all civilisations deserves our thanks as the preserver of literature and protector of thought and culture.

Professor Rangachariar then pointed out that Indian religion has had two different stages of progress, an earliest ritualistic stage—we might call it by the name of Vedism—and a later philosophic stage which might be called Vedantism. The education under the influence of Vedism had an ideal different from the education under the influence of Vedantism. The former ideal concerned itself with the maintenance of the social order found enunciated in the sacred law-books of the Hindus. Everything was made subservient to the maintenance of that plan of life and society, because the *ashrams* or various stages of life had to be guarded and nationalised. That was the older ideal. The later Vedantic ideal of education concerned itself more with the development of the individual, his self-conquest, and self-illumination. Neither of these two ideals is calculated to give a practical turn to education. The education which is to maintain several distinctions and differences in social prerogatives, as well as the education which aims at the development of individual morality, cannot take cognisance of the well-being of a community as a whole. Nevertheless in the later

ideal we see that all were declared to be worthy of the endeavour after self-conquest; and all those who had themselves attained such an end were considered to be worthy of becoming teachers; neither the right to teach could be the exclusive privilege of a particular class, nor the right to learn denied to any one that was desirous of learning. This individualistic ideal of education also ignores the common well-being of the community, confining itself to the development of the moral culture of the individual. Obviously the faith of the Vedantin seems to have been that if he took care of the individual the society could take care of itself. Modern Indian history only too amply bears out that he was very much mistaken in his calculations. Other causes have also contributed to this unpracticability of ancient Indian culture. The Professor however warned his hearers not to be uncharitable in criticising ancient educators, for their environments determined the nature of this work.

The Professor thus concluded his interesting lecture.—

I feel hopeful that many of you will not be dazzled to the point of blindness by the influx of the brilliance of Western knowledge, so as to ignore the many merits of your ancient and national system of education and the many worthy literary and scientific products which have been derived out of that system. In all matters, progress to be real must be continuous. It is foolish not to see that the old stream of thought in India has to be trained to flow along new channels. Neither haste nor hesitation will help us in the work. Haste is sure to cause undesirable breaches in its banks, and hesitation will keep off for an unduly long time its fertilising waters from many fresh fields of great promise. In our endeavour to make learning more practical and utilitarian in our country, following the tendency of modern civilisation and modern learning, we must take care not to allow the spirit of the mercenary into the holy precincts of the shrine of thought and culture. Indian learning of the genuine type has never known such spirit and a very heavy responsibility rests to-day on the shoulders of teachers in India, whatever be the position they occupy in the noble profession to which they have the honour to belong. Their endeavour must be to mingle the new light of the West with the old light of the East and to make the combined product shine well in all the homes of our historic land.

A GREAT EDUCATIONAL ENDOWMENT.

America has been famous for large and munificent endowments by her wealthy citizens for educational institutions. Many of her Universities and colleges owe

their existence to private generosity. The latest announcement is that "Mrs. Stanford has now completed the endowment of the Leland Stanford Junior University which she and her husband established at Palo Alto, in California, in 1891 by transferring to it a sum of 30,000,000 dols. (£6,000,000) in bonds, stocks, and real estate. This is the largest gift ever bestowed upon an institute of learning. The real estate comprises 900,000 acres, including Mrs. Stanford's home in San Francisco, which will eventually be made into an art gallery. Mrs. Stanford still has fortune of several million dollars.

EXAMINERS AND UNIVERSITY EDUCATION.

In discussing Lord Curzon's speech at Rangoon upon University education, the *Indian Spectator* incidentally declares that the system of appointing Examiners is the worst feature of University education in India. It condemns the practice of appointing as Examiners men who are also responsible for teaching the candidates examined, and continues:—How is this mischief to be remedied? By outside Examiners? Where are they to be found? Countless, no doubt, will be the candidates for examinations. But where shall we find men of sterling worth, if not amongst the staff of Professors, and some private gentlemen will be found qualified but not willing, to undertake the work, whereas those unqualified would leave no stone unturned to be pitchforked into the Board of Examiners through sheer ignoble influence. Altogether, therefore, the present system of selecting Examiners bristles with destructive horns. Do away with the examinations we cannot find qualified, as well as thoroughly impartial Examiners, we must. After having carefully considered the question from all points of view, we come to the conclusion that teachers of candidates should not on principle be appointed their Examiners, and from amongst outsiders only those really qualified for the work should be selected. If these are not forthcoming to undergo the bother, rather than have second and third-rate men, the very best men should be offered enticing remunerations. If funds do not permit this, and if the extra cost necessitates an increase in the admission fees which might tend to become prohibitive, then we think the services of a regular and permanent staff of Examiners of recognised merit and integrity should be engaged by Universities for conducting all the examinations.

ART EDUCATION IN BOMBAY.

The Report of the Director of Public Instruction contains a chapter on "special instruction," in which the operations at Bombay School of Art are dealt with. It

shows that the number of pupils on the register continues to increase, and that during the past year the total rose from 335 to 381. Perhaps the most interesting part of the School of Art, writes Mr. Giles, is contained in the Reay Art Workshops, where, at the time of his visit, 162 apprentices were working. Enamelling, gold and silver work, carpet-weaving, wood-carving, copper and brass work, iron work and pottery are engaged in. Endeavours are being made by giving competent lads pay to retain them in the workshops, when they would otherwise have to earn wages before becoming really skilled artificers. The principal, Mr. Burns, proposes to pass each student through a systematic course of study for two years in each workshop, and devote a third year to practical works in the craft which each student proposes to follow. Until a pupil has passed through the whole three years' course, no certificate of any kind will be issued to him.

REFORM OF ENGLISH GRAMMAR.

Professor Chamberlain, of Clark University, Worcester, Mass. U. S., proposes to reform English grammar. He proposes to:—(1) Drop the subjunctive mood; (2) drop inflected forms for past tenses and participles, for example "gotten"; (3) avoid the use of differing forms for verb and noun; (4) avoid plural forms for nouns; (5) avoid Greek and Latin names for new things; (6) avoid feminine forms of nouns, for example "authoress"; (7) avoid forming adverbs by inflection and use the same word for adjective and adverb; (8) omit the conjunction "that" where possible; (9) use "but" "as" as full prepositions; (10) use "who" for "whom"; (11) do not distinguish between "who" and "that" or "that" and "which." Let the fittest survive in each case; (12) use pronouns compounded of "self" and their plurals as subjects and objects; (13) drop the apostrophe in the possessive case. Some readers will be inclined to add (14) drop the English language altogether.

THE LATE MR. B. CAMA.

News has been received of the sad death of Byramji Cama, M.A., I. C. S. one of the twin brothers who, after a distinguished university career in India, proceeded to England and about this time last year won a high place in the Mathematical Tripos at Cambridge, and a few months later in the Indian Civil Service examination. The twin brothers were expected here in a few months, but the cruel hand of death has snatched away Byramji.

Legal.

"TRUSTS" IN ANCIENT INDIA.

A letter recently sent by a Sanskrit scholar to the *Frankfurter Zeitung*, states that "Trusts" were known to the natives of ancient India, for the Yajñavalkya (II. 249), the code of law which with the Manu forms, even at the present time, the basis of the law administered to the natives in Indian Courts, contains the following directions: "The highest money-fine is to be applied to people who unite and fix the prices of products to the detriment of artisans and artists, although they are well aware of the rising and falling of prices. The same fine is also to be applied to all merchants, who exclude merchandise by a wrong price, or are selling the same at the latter." The Yajñavalkya law-book was introduced about 300 A. C., and the part quoted above fully shows how advanced was the economic life of the ancient Indians even in those early times. Incidentally it also furnishes, in regard to the prohibition of trusts, an interesting sidelight on the school of thought at the age referred to.

LITIGATION IN ENGLAND.

No country in the world, says the *Law Journal*, having regard to its population, has so small a number of Judges as England. Ireland, with a population of less than five millions, has seventeen judges, while England, with a population seven times as large, has only twenty-nine judges. But what would our contemporaries say if he knew that Bengal with a population of over fifteen times that of Ireland and more than twice that of England has only thirteen judges. Still the *Globe* will have it that India is the most litigious country in the world. And forsooth why? Were not there sixteen appeals before the Judicial Committee last term from the whole of India comprising of over 300 millions of souls and only seven from the colonies with a population of about one-thirtieth that of India and two from Hongkong with only one-six hundredth of India's population. The Indian appeals were so "frivolous"! villagers in one case claim a right to the flow of water in and out of a tank. If anything goes wrong with a tank, send for a plumber, why appeal to a court of law? Are not tanks the size of tin-boxes and could the people not quench their thirst with ale and leave tanks for flushing purposes? But alas, beer would not help the growing of crops or avert a famine! The twentieth century English press savours somewhat of the seventeenth century platform speeches, regarding

which a satirist said "what torrents of nonsense flow like bottled ale—shallow, muddy and mighty dull."—*The Calcutta Weekly Notes*.

BIGAMY.

The trial of Earl Russell (1901) A. C. 446, may be briefly noted inasmuch as it shows that an offence which would not be punishable in Canada according to *Regina v. Plowman*, 25 O. R. 656, is punishable in the United Kingdom. In other words, if the noble culprit had taken up his residence in Canada instead of going back to England, after his bigamous marriage in the United States, he would have enjoyed practical immunity from punishment. It would seem that this is a matter which should engage the attention of the learned Minister of Justice in order that this anomaly may be in some way removed.—*Canada Law Journal*.

LORD RUSSELL.

The great power of the late Lord Russell of Killowen as a humourist has been somewhat discounted owing to the brilliancy of his more indubitable intellectual talents. The *Liverpool Post* has revived the recollection of a typical instance of the late Chief Justice's peculiar humour. When he was Sir Charles Russell he began a political speech before an audience in Scotland, of set purpose, with some very badly pronounced Scotch. After the confusion caused by his apparent blunder had ceased, he proceeded thus: "Gentlemen, I do not speak Scotch, but I vote Scotch." Tremendous applause followed, and Sir Charles continued: "And I sometimes drink Scotch."

CROSSED CHEQUES.

A decision of considerable importance with respect to the practice of banking has been recently given by the Court of Appeal in an action brought against the London City and Midland Bank. The plaintiff, Mr. Gordon, who is in business at Birmingham, had between 1895 and 1899 a confidential clerk whose duty it was to open letters and set on one side for his employer's endorsement any cheques which they contained. The clerk, who also carried on business on his own account, made use of his opportunities to steal a large number of cheques, amounting in value to over £2,000, and after forging the endorsement of his employer's firm, and adding his own endorsement, he paid them into an account which he had with the branch of the defendant Bank at Sparkbrook, Birmingham. They were at once placed to his credit in the books of the Bank, and in due course their value was collected from the Banks on which they were drawn.

Now a cheque properly used is an invaluable means of facilitating business transactions, but in fraudulent hands, as recent disclosures have shown, it is a fertile source of trouble. In the present case the forged endorsements were ineffectual to deprive Mr. Gordon of his right to the cheques, and any one dealing with them, whether in good faith or bad, would be liable to him in damages. To this rule, however, the Legislature has, by the Bills of Exchange Act, introduced an exception in favour of bankers. If a banker honestly receives payment for a customer of a crossed cheque to which the customer is not entitled, then the banker incurs no liability to the true owner of the cheque. When Mr. Gordon claimed from the London City and Midland Bank the value of the stolen cheques, the bank, as regards such of the cheques as were crossed, naturally sought shelter under this provision, and at first sight it seems to meet the case fairly enough.

But the Court of Appeal have proceeded upon a reading of the Statute which bankers at any rate will consider to reveal a serious defect in it. It has been held that inasmuch as the cheques were at once placed to the credit of the clerk's account, the Bank took over, or purchased them, from the clerk; and when they were subsequently collected the proceeds were received by the bank for themselves, and not for their customer. Had they abstained from putting anything to his credit till the cash was in hand the result would have been different. They would then have collected the cheques for the customer, and the Statute would have been a protection. The practice of placing cheques at once to a customer's account, where it prevails, is a convenience to customers, and is very rarely the cause of difficulty. In the event of a cheque being dishoured the customer's account bears the loss. But this decision, if it is affirmed by the House of Lords, where it seems, there is some chance of its being taken, will doubtless make Banks re-consider their position.—*Daily News*.

LORD MORRIS AND JOHN MORLEY.

While feeling was running high in England over the "Home Rule" question, John Morley, chancing to meet the late Lord Morris, the Lord Chief Justice of Ireland, expressed surprise at the cordiality with which the latter, who was above all, an Irishman, greeted him.

"Ah, come now," said the Chief Justice "sure I've known many worse—in the dock."

Trade & Industry.

INDUSTRIAL EDUCATION IN BARODA.

With the unique shrewdness, and far-seeing statesmanship which has always been characteristic of the Gaikwar of Baroda, His Highness sent at State expense Mr. Magan Lal C. Desai B.Sc. Principal, Kala-Bhavan to witness the Paris Exhibition of 1900. It would appear the main object of the trip was to examine carefully those handicrafts, the raw materials of which can be had in India, and, if possible, to introduce some of them whereby the importation of some of the articles of daily use from foreign countries may be lessened in proportion as they are manufactured in India.

In accordance with the request of the Gaikwar, Mr. Desai has presented a report in which, among other things, he points out how several arts and industries can be introduced in the Baroda State.

He recommends the introduction into the Baroda Raj of the following industries:—

Home Industries.—Plain cloth weaving, Carpet weaving, Tapestry weaving, Galicha making, Making of buttons and combs, Lace making, Embroidery, Ribbon weaving, Crochet work, Brush making, Fancy cane work and bamboo work. Leather stamping and embossing, Wood carving, pottery and fancied work on Pottery, Pyrography, Poker work or Burnt wood etching.

Manufactures.—Nib making, Match manufacture, including wax matches, Leather manufacture, Sugar manufacture, Paper making, Glass manufacture, Candle making, and Soap manufacture. The establishment of home industries is a question which deserves prompt attention. This class includes those industries which do not require the use of big machines and in which the artisan can derive sufficient assistance from the members of his family in working up an article, and by so doing he will be in a position to add to his income and hence to his happiness. The second class embraces those industries wherein the use of big machinery and investment of large capital are required. The establishment of any industry belonging to the second class requires much precaution and mature consideration, for if it be introduced hastily, it is doomed to fail and thus it will be a stumbling block to the introduction of other industries. The intricacies of the working of the above industries are treated in sufficient detail and they are very interesting as affording valuable information to all those

who may care to revive the industrial activity of the country.

We trust Mr. Desai's trip will be productive of much good to the Baroda State whose ruler has already testified to the great interest he takes in the well-being of his subjects.

AN INSTRUMENT FOR FOCUSSING THE 'SUN'S RAYS.

Among the exhibits at the recent Congress Industrial Exhibition, an Indian invention which attracted a good deal of attention was the *Bhanutap*, an instrument for focussing the sun's rays for purposes of heat and power. The inventor of the instrument is Mr. Sri Krishna Joshi of Almora, who filed an application for patenting it so far back as July 1899. Eminent scientists in Europe, Nicolas Tesla, among others, have for some time been engaged in devising means for harnessing the sun's rays so as to be able to dispense with the use of fuel for domestic and industrial purposes. We have the satisfaction of knowing that in India a step has been taken in this direction which is successful in so far that the appliance is serviceable for cooking purposes. The inventor, we are told, has been successful in turning a small model engine by heating a boiler with focussed sun's rays, and he is hopeful of being able in time to work steam-engines for industrial purposes by means of his apparatus. If his experiments prove a success, it is hoped that it would be the means of effecting by far the most momentous industrial revolution in modern times. The use of focussed sun's rays for heating and cooking purposes is by no means a new thing in India. There is a tradition that the Emperor Akbar, who was an adorer of the sun, had an instrument prepared for heating water by focussing the sun's rays, and this water used to be distributed as sacred liquid among the members of his family and his courtiers.

AN ALOE FIBRE COMPANY.

We have it on the authority of the "*Madras Mail*" that a Company is about to be formed to take over the concessions and business of the South India Fibre Syndicate, which requires further capital for the purchase of new and improved machinery, engines, baling presses, finishing and drying sheds, etc., as also for the cost of planting up its land. The proposed capital of the Company is Rs. 4,00,000 in 4,000 shares of Rs. 100 each. The proposed terms of purchase are a cash payment of Rs. 25,000 with an allotment of 1,500 fully paid-up shares to the vending Syndicate. The property to be made over consists of (1) a concession of 20,000 acres of land from

Government; (2) leases of long mileages of roadside aloe hedging in Anantapur and Kurnool, and (3) sundry manufacturing plant and accessories. It is stated that no such quantity of aloe hedging or plantation outside that already in the possession of the Syndicate can be obtained in this or in any other part of India, except on a few railway lines, which are barred from the market. The Company, therefore, will have plenty of material to work upon *ab initio*, and without planting, though it will meanwhile plant up large areas which will be productive a few years hence. The fibre already produced by the South India Fibre Syndicate has been pronounced by Messrs. Ide and Christie, the leading London fibre brokers, to be superior to that received from the Bahamas or Mexico, and a consignment recently sold in public auction realised the top market price then ruling, *viz.*, £ 32-10 per ton. On a basis of only £ 25 a ton the promoters calculate that the Company will make a profit of 30 per cent. on its capital!

MATCH TRADE.

A report by the United States Consul at Bombay states that no matches are manufactured in India, they are all imported. The four countries in keenest competition for this trade are well-known from the names painted on the familiar little safety-match boxes. Japan has, for the past six years or more, headed the list, with the Straits Settlements second and Belgium and Sweden following in the order named. The value of the match trade in India last year was nearly 40 lakhs of rupees (266,000L.), of which these four countries supplied about four-fifths. The remainder was furnished by Germany, Norway, England, and other countries.

The great bulk of these matches consists of what is known as the "safety match." In the interior, and away from large centres of population the natives have long been accustomed to the old-fashioned sulphur matches, and by force of habit still use them. However, outside of this, the matches in general use are the "safety." Sixty matches are put into each little box, which is stamped with the country of origin. Twelve of these boxes are wrapped in a blue paper-covered package; they retail in the bazaars of Bombay at 1 anna 6 pies (about $1\frac{1}{4}$ d.) per package.

HOW TO TELL HAND-MADE PAPER.

In the *Memorial de la Librairie Francaise* for August 29th is this interesting note: "To distinguish if a paper is hand or machine-made, cut out pieces in a circular shape about three or four inches in diameter, and place them in a basin of water so that they float on the surface.

The machine-made paper will be found to curl up on two sides towards the middle, whereas in the hand-made paper the edge will turn up all round like the raised edge of a plate."

THE CONGRESS AND INDUSTRIAL DEVELOPMENT.

The recent Congress at Calcutta has passed the following resolutions bearing on this question.

That a committee be formed to report to the Congress next year whether it is desirable to adopt the following resolutions with or without amendments and alterations:—

(a) That in the opinion of the Congress much of the present state of economic depression of the country is owing to want of knowledge of the methods of production and distribution of foreign countries, and that it behoves our countrymen to adopt means to bring advanced knowledge and exact information within the reach of the people

(b) That one of the most important economic questions that require solution at our hands is the organisation of capital and credit in villages, towns, provinces and the country. The Congress invites attention of their countrymen to make any sustained and extensive efforts to *Organise Capital* and remove one of the many difficulties in the way of improvement of our economic condition.

* * *

That this Congress deplors the recurrence of famine in a more or less acute form throughout India in recent years and records its deliberate conviction that famines in India are mainly due to the great poverty of the people brought on by the decline of indigenous arts and industries and the drain of the wealth of the country which has gone on for years, to excessive taxation and over-assessment of land consequent on a policy of extravagance followed by the Government both in the civil and military departments, which has so far impoverished the people that at the first touch of scarcity they are rendered helpless and must perish unless fed by the State or helped by private charity. In the opinion of this Congress the true remedy against the recurrence of famine lies in the adoption of the policy which would enforce economy, husband the resources of the State, improve the agriculture of the country, foster the revival and developments of indigenous arts and manufacture and help forward the introduction of new industries.

— o —

Medical.

THE PROPERTIES OF VEGETABLES.

The following information regarding the properties of common vegetables may be useful to most people. Spinach has a direct effect upon the kidneys. The common dandelion used as greens, is excellent for the same trouble. Asparagus purges the blood. Celery acts admirably upon the nervous system, and is said to be a cure for rheumatism and neuralgia. Tomatoes act upon the liver. Beets and turnips are excellent appetisers. Lettuce and cucumbers are cooling in their effects upon the system. Onions, garlic, leeks, olives and shalots, all of which are similar, possess medicinal virtues of a marked character, stimulating the circulatory system, and the consequent increase of the saliva and the gastric juice promoting digestion. Red onions are an excellent diuretic, and the white ones are recommended to be eaten raw as a remedy for insomnia. They are a tonic and nutritious. A soup made from onions is regarded by the French as an excellent restorative in debility of the digestive organs.—*Health*.

COFFEE.

When there are in a community epidemics of typhoid fever, cholera, erysipelas, scarlet fever, and the various types of malarial fever which are transmitted almost entirely through the medium of food and drink, coffee is a valuable agent and may be used as a drink instead of water.

It is a valuable agent in assisting the digestion of food, and aids the blood in taking up more nourishment than it would without it.

It quickens the circulation of the blood and of respiration.

It is also stimulating and refreshing (due to the caffeine it contains).

In tiding over nervousness in emergencies it is a sovereign remedy.

Taken in the morning before rising, minus cream and sugar, it acts in many cases as a superior laxative (probably from the hot water contained in it).

As a stimulant and caloric generator in cold weather it is 100 per cent. ahead of whisky or other liquors.—*Health*.

FRUIT CURES.

Of the innumerable "cures" which have from time to time come before the public the simplest and most agreeable is perhaps the "fruit cures". Fruits are divided, by fruitarians, into five classes—the astringent,

the mealy, the oily, the acid and sweet. Each, it is claimed, has an especial value. The grape is the king of all curative fruits, and is recommended particularly to the consumptive, the anæmic, and the dyspeptic; also for gout and all liver complaints. The prescription in each is very simple, varying of course according to the complaint. To begin with, the patient consumes from a half to a pound and-a-half of grapes daily, increasing gradually to nine or ten pounds. This diet is to be continued until the patient's health shows a general improvement. To the sweet fruits a special hygienic virtue is ascribed, particularly to the plum, as a remedy in rheumatism of the joints or as a preventive to gout. The acid class is the largest, including as it does raspberries, strawberries, peaches, apples, gooseberries, cherries, lemons and oranges. All these fruits are prescribed for stomach troubles.

DIABETES.

Diabetes, says a medical paper, is an extremely dangerous and generally fatal disease, the principal symptom of which is an amazing discharge of an excessive quantity of pale urine. The causes of this disease are sometimes traceable to hereditary tendencies, but it is brought on or encouraged by eating excessive quantities of vegetable food and drinking extravagantly of water. Once set in it is considered incurable, though its course may end in weeks or years. It is best kept off or mitigated by abstention from much vegetable food, and by three meals a day of roast beef or mutton, which diet often leads to the most gratifying amelioration. Beer and warm drinks should be avoided as well as spirits, but a regular allowance of good wine is desirable. The premonitory sign being invariably an inordinate desire to eat and drink large quantities, care should be taken to guard against that extravagance.

OBJECTIONS AGAINST THE PURIFICATION OF WATER.

A scientist with the alarming name of Bizzozzero objects to the purification of drinking water by boiling. He alleges that:—

- (1) The water loses its air, and is not so digestible.
- (2) The water loses its free carbonic acid gas, which normally gives it a piquant taste.
- (3) There is a loss of lime salts, which are necessary to our nutrition.
- (4) Boiling gives water a specific unpleasant taste.

Bizzozzero takes up these objections one at a time and shows that the air can easily be re-introduced into water after boiling merely by shaking it for a minute

or two. He shows that the amount of carbonic acid gas normally present in drinking water is entirely too small to impart any taste at all to it. The lime salts in the water are quite unnecessary, as they are supplied better in other food. He claims that no specific unpleasant taste occurs if the water is boiled in clean glass or enamelled ware receptacles and cooled off rapidly afterwards. He considers that the best all-round method for sterilising drinking water.

EXCESSIVE TEA-DRINKING.

An American Medical Paper writes:—Few people realize that the difference between drinking of alcohol and tea, is simply a question of degree. It is true that the harmful consequences of excessive tea-drinking are not as serious as those from over indulgence in ardent spirits; but the pernicious effect of the constant drinking of strong infusions of tea, justify us in calling the practice a serious menace to health. Tea leaves contain from 2 to 4 per cent. of caffeine or theine, which is an alkaloid, and is always found in combination with tannin. They also contain a volatile oil, which is the source of the aroma, and in addition, possess sedative qualities. Tannin is a most powerful astringent, and hence is strongly provocative of constipation. Its action upon the inner surface of the stomach is disastrous to that organ as it arrests the excretion of the gastric juice by its contractile effects upon the glands. Its constant use will almost invariably result in digestive disturbances, and will intensely aggravate such troubles, if previously existing. It is true that a cup of hot tea is a refreshing beverage; but not more so than a cup of hot milk or cocoa; in fact, it is the heat that imparts the sense of comfort. Children should never be allowed to drink either tea or coffee, as the seeds of a baneful habit may be sown; for in tea, as in dram drinking, it is a habit easily acquired. The votaries of the tea cup by far outnumber those of Bacchus, so that, granting that tea drinking is a little less severe in its constitutional ill effects, yet the greater prevalence of the habit renders it equal to alcohol in its destructive effects.

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Science.

NEW DEVELOPMENTS IN PHOTOGRAPHY.

An important discovery in Photography has been made which will be of far-reaching consequence both in pure and applied photography. Steinitzky, of Bomberg, has shown that photographs can be made to take a very high degree of polish, so as to be capable of ornamenting surfaces of glass, porcelain, metals, marble, wood, horn, ivory, &c. The pictures are absolutely permanent, either in light or in dark shades. For example, a photograph can be made on porcelain in highly-polished gold, and, produces a transparency giving an effect hitherto unattainable. The invention is patented.

ELECTRICITY AND RAIN.

According to Professor Gates, electricity in the atmosphere produces rain and drought, the changes of barometric pressure and various meteorological disturbances, such as waterspouts and tornadoes. A charge of electricity, he states, diminishes the density of the air, and therefore its pressure. When two oppositely charged masses of air approach each other, they become denser, and the barometer rises.

PLANTS AND ELECTRICITY.

M. Berthelot announces he has proved that the development of plants is affected by electricity. He has been carrying out the experiments at his country seat at Neudon, near Paris. A tower nearly 90 feet high is erected in the grounds, which M. Berthelot has been using for experimenting on the influence of natural electricity in transferring to plants free nitrogen from the atmosphere, and also for studying the variations produced on plants by altitude. One of M. Berthelot's experiments was directed to proving that a plant submitted to the influence of electric waves absorbs more nitrogen than another plant placed under the same conditions, but not influenced by electricity. M. Berthelot considers he is justified in supposing that he has fully demonstrated that free nitrogen in atmosphere plays an important part in the life of plants, on the ground that crops of vegetables are obtained in high altitudes without the use of artificial manure, owing to the greater tension of the electricity.

THE TEMPERATURE OF ICE.

Is ice colder in winter than in summer? Most people suppose not. They understand that ice is ice, and cannot be any colder or warmer.

If a thermometer is buried in ice in summer it

will indicate 32°. If you throw a piece of ice into boiling water and leave it there till it is almost gone, what is left will still be at 32°. Ice can never be above that temperature.

But while ice can never be warmed above 32°, it will go as much below that as the weather does. An iceman delivering ice in January, when the thermometer was below zero, was asked whether his ice was any colder than in July. He thought not. But as a matter of fact a piece of summer ice would have been a foot-warmer for him, as it would have been 30° warmer than the air of the bottom of his waggon.

Mixing salt with ice makes it much cooler. The ice in an ice-cream freezer goes down to about zero. This is why the point zero on our thermometer was fixed where it is. It was supposed to be the lowest point that could be reached by artificial means. Since then we have reached about 383° below zero by chemical processes. Ice will cool down with everything else, on a cold night, to zero or below. What should prevent it? On a day when it is just freezing, a block of iron and a block of ice outdoors will stand at 32°. If the weather grows warmer the iron will warm up with the weather, but the ice will stay at 32 degrees and melt away. But if the weather grows colder the iron and the ice will cool off, too, and one just as much as the other.

As the ice grows colder it gets harder and more brittle. There can be no fancy skating on the pond on a zero day, for ice is then too brittle. Slivers of ice dipped in liquid air become so hard that they will cut glass. Water thrown on ice in the Arctic regions will shiver it like pouring boiling water upon cold glass. This is because the ice is so much colder than the water—*Invention*.

AN APPARATUS TO PREVENT COLLISION OF VESSELS.

A man in Sweden has invented a device for stopping the headway of boats, which he believes would be an absolute protection against collisions. It may be used on vessels of all kinds. The apparatus consists of steel plate shutters, applied on both sides of the vessel, about one-quarter of its length from the stern. The helmsman has the shutters under his control, and can open or close them by means of a lever. In a test on a large steam launch going at a speed of nine knots a stop was made in fifteen seconds, within one-half its length, by reversing the engine and extending the shutters.

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It may be stated that a page of the Review takes in about 750 words.

All contributions, books for Review should be addressed to Mr. G. A. Natesan, Editor, The Indian Review, Esplanade, Madras.

Notice to Subscribers.

IT is particularly requested that any change in the address of the subscribers may be early intimated. Complaints of non-receipt of particular issues of the Review received after the month to which they relate will not be attended to, and such, as well as old numbers of the Review will be charged for at eight annas a copy.

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The University Commission.

The Indian University Commission presided over by the Hon. Mr. Raleigh commenced its sittings in Madras on Wednesday the 18th inst. All the members of the Commission including the Hon. Mr. Justice Gurudoss Bannerji were present. The Hon. Mr. Raleigh, in opening the proceedings explained on behalf of his colleagues the scope of the Commission. He assured them that it was not at all intended to introduce any revolutionary changes. The Universities of India, Mr. Raleigh observed, had been in existence for less than half a century, and when they considered their resources, their opportunities and their peculiar difficulties they might cheerfully acknowledge that much good work had been done. Complaints were heard from time to time that the Universities are merely Examining Boards; that the Colleges are content to impart a modicum of book knowledge; that there is no sufficient provision for advanced study and research, and that the examinations are so conducted as to encourage the crammer and to hamper the efforts of the best teachers. Mr. Raleigh stated that if the Commission should find that these complaints were in any degree well-founded, they would spare no pains to ascertain the true explanation of their failures and to indicate the points in which their system admitted of improvement. If on the other hand it found that the work done was really good or as good as circumstances and conditions permitted, it would not press for changes in institutions which worked well.

In the course of his recent address to the graduates of the Calcutta University, Mr. Raleigh deprecated the hasty inferences which have been drawn from the action of the Government in appointing this Commission. He said, because a Commission is appointed, it is not to be assumed that Government has already passed judgment on our University system, or that immediate and extensive changes are in contemplation.

Lord George Hamilton and the Famine Union.

The *Pall Mall Gazette*, recently sent a member of its staff to interview Mr. Lloyd George, a political opponent who happens just now to be very much in public gaze. Among other things, Mr. Lloyd George said, "Take that poor creature you have got at the head of the India Office, Lord George Hamilton. Can you pick out a single man on the Liberal side, without exception, who would be less capable of discharging the duties of that very great and responsible post?" Making due allowance for exaggeration, we still venture to think with many others, that there is foundation for this remark. For it is difficult to mention any previous Secretary of State for India who has been so obstinate in his ignorance, so wilful in his sinful optimism, and so callous to the repeated warnings of a host of officials and non-officials regarding the present unsatisfactory economic condition of India. His refusal to receive a deputation of the Indian Famine Union is an instance in point. Among the signatories to the Indian Famine Union memorial, we find the names of several late Viceroy's of India, Governors, Lieutenant Governors, Retired Chief Justices and Judges of the High Courts, Members of the Councils in India, and several other notable persons who have lived in India and become intimately acquainted with the condition of the country and its people. Yet, we find the Secretary of State telling these gentlemen that he has nothing to learn from them. He has within recent years sanctioned the constitution of Commissions for the investigation of subjects of undoubtedly lesser importance compared with the great question whether the Indian ryot has grown for better or for worse under British rule. Lord George Hamilton's treatment of the Indian Famine Union and his silence in regard to the grave disclosures contained in the secret official records published by Mr. Digby in his recent book, lend color to the popular view that the authorities are convinced that the condition of the Indian ryot has grown irretrievably bad.

Mr. Thorburn on British Rule.

We trust Lord George Hamilton has read the interesting lecture on India recently delivered to the Fabian Society by Mr. S. S. Thorburn, formerly Financial Commissioner of the Punjab. It is something that while the most responsible official for India is taking a roseate view of the condition of the Indian ryot, a clever and conscientious civilian who has held several responsible posts should be describing to the British public the real situation in India. After hearing Mr. Thorburn's lecture, Mr. Bernard Shaw is said to have observed in the course of a vivacious speech that he had till then suspected Mr. Hyndman of painting the condition of India in dark colours, but after hearing the indictment brought by Mr. Thorburn in the ablest paper on India that the Fabian Society had ever heard, he should henceforward regard Mr. Hyndman as almost a culpable apologist of the Indian Government. Mr. Thorburn's paper was chiefly a criticism of the views of Messrs. Naoroji and Dutt. He agrees with these two eminent Indians that the condition of the people is miserable, very miserable indeed, but he differs from them as to the causes which have contributed to the resourceless and impoverished state of the Indian ryot.

Says Mr. Thorburn :—

In my opinion it is not the "tribute," not the weight of the land tax, not the salt duty, not England's commercial policy, which are chiefly responsible for the pauperisation of rural India. All these causes may be contributing factors, some certainly are; but the root cause of the increasing poverty and self-helplessness of the Indian peoples may be most comprehensively expressed by the term our "system."

And what has been the result of this "system."

Each famine that has occurred has submerged more and more of the peasantry, and as famines have of late years been increasing in frequency and intensity, more than half of the agriculturists of British India, a few favoured localities excepted, are now in about as miserable a plight as human beings not officially designated slaves or serfs, can be.

Is there no remedy for improving the situation? Mr. Thorburn says that Government must retrace its steps, simplify the laws and procedure

affecting the agriculturists, limit their powers of alienating land, and impose heavy import duties on cotton piece goods. Mr. Thorburn, however, honestly says that especially in regard to the last suggestion India's dependence on England makes it impracticable. Here is his conclusion :—

The present Government of India has officially admitted the evils resultant from our "systems" and has begun a series of experimental reforms, but the opposition is strong and in any case progress will be slow, and behind all is the discouraging fact that for more than seventy millions of the sufferers it is too late for any change of system to be beneficial.

Recent Legislation in India.

A regrettable and retrograde tendency is noticeable in several of the recent legislative enactments of the Government of India and of the various Local Governments in this country. We refer to the measures which have deprived the citizen of his legitimate right of appeal to the Civil Courts against the arbitrary acts of the Executive. The Madras Court of Wards' Amendment Bill which has just been passed into law is the worst instance one could cite in point.

A careful perusal of the article on this subject which appears elsewhere will show the extraordinary nature of the arbitrary powers which this latest specimen of legislation bestows on an uncontrollable executive.

The Anglo-Japanese Treaty.

It is to be hoped that the treaty recently concluded between Japan and England will really make for the peace of the world and not be a contributory cause to the jealousy of other nations to put their strength to trial. It is obvious the Anglo-Japanese treaty is the outcome of the recent Manchurian treaty. Britain and Japan have early enough combined together to preserve the integrity of China and not allow it to be slowly swallowed by Russia. America is expected to maintain common cause with Britain and Japan. May we hope that the alliance of the three may be relied on for the peace of the world?

Land Revenue in India.

With an earnest desire to contradict the statements made by Mr. R. C. Dutt and other retired officers of the Indian Civil Service that the land assessment in India is excessive and that the intensity and frequency of recent famines are largely due to poverty caused by such over-assessment, the Government of India have recently issued a resolution reviewing the whole question of the land revenues of India in their relation to the incidence of famine. The resolution is a long one. We cannot at present enter into a detailed and critical examination of the various points raised by the Government of India. We content ourselves with reproducing the following conclusions arrived at in the resolution :—

(1) That the permanent settlement in Bengal or elsewhere is no protection against the incidence and consequences of famine; (2) that in areas where the State receives land revenue from landlords, progressive moderation is the keynote of the policy of the Government, and that the standard of 50 per cent. of assets is one which is almost uniformly observed in practice, and is more often departed from on the side of deficiency than excess; (3) that in the same areas, the State has not objected, and does not hesitate to interfere by legislation to protect the interests of the tenants against the oppression at the hands of landlords; (4) that in areas where the State takes land revenue from the cultivators the proposal to fix the assessment at one-fifth of the gross produce would result in the imposition of greatly increased burdens upon the people; (5) that the policy of long term settlements is gradually being extended, exceptions being justified by the conditions of local development; (6) that a simplification and cheapening of proceedings connected with the new settlement and an avoidance of the harassing invasion of the army of subordinate officials are a part of the deliberate policy of the Government; (7) that the principle of exempting or allowing for improvements is one of general acceptance, but may be capable of further extension; (8) that assessments have ceased to be made upon prospective assets; (9) that local taxation as a whole though susceptible of some redistribution is neither immoderate nor burdensome; (10) that over-assessment is not as alleged a general or widespread source of poverty and indebtedness in India, and that it cannot fairly be regarded as the contributory cause of famine. The Government of India have further laid down liberal principles for future guidance and will be prepared, where the necessity is established to make further advance in respect of (11) progressive and graduated imposition of large enhancement; (12) greater elasticity in the revenue collection facilitating its adjustment to the variation of the seasons and the circumstances of the people; (13) more general resort to reduction of assessment in cases of local deterioration where such reduction cannot be claimed under the terms of the settlement.

In this connection we may draw attention to Mr. Rogers' article on "Land Assessments in India" which appears elsewhere.

Chrome Tanning in India.

We are glad to learn that Mr. K. E. Talati, Proprietor of the Minocher Leather Works, Bombay, is now in a position to introduce in India the latest American chrome process for rapidly tanning leather. In a letter from London, dated 12th. December, Mr. Talati wrote to us :—

Now for these 4 years or more, the American tanners have invented a quick process wherein they tanned the skins in 48 hours which we do in 40 days and this kind of leather is admirably suited for boot purposes as it is *soft, water-proof and durable*. Since the introduction of this quick process, the Americans have been buying lots of skins—goat—in the *raw state* and have been finishing them in their own way. The result was that the Madras tanners had to close their works as they could not afford to pay as much as the Americans paid, and as our tanners did not *advance with the times* they had to suffer. I know the *theory* of this process, but I wanted to see how it was done practically and I saw it *in practice* in Boston, New York and Philadelphia staying there for some months, and actually worked in a tannery there.

In a later communication Mr. Talati writes—
"I want to teach twenty tanners or gentlemen, and twenty only out of the whole of India, this art, and charge each of them Rs. 1,000 only. I teach them on this condition, that they must appoint me their sole selling agent of the finished skins for at least ten years."

We are afraid that the conditions which Mr. Talati imposes on his would-be pupil, are very hard and are such as no prudent business man would agree to. To be plain they smack too much of business. We would warn Mr. Talati that the good work he is likely to do for promoting the industries of his country would lose much of its value by a little too much attention to personal profits, and we would instance the case of Mr. S. J. Tellery's scheme for the revival of industries, which good in itself, was, however, discredited on account of the provisions made therein for personal profits.

INDEX FOR Vol. II (1901.)

An exhaustive index for last year's volume of the Indian Review is in type and will be issued with the March number.

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LAND ASSESSMENTS IN INDIA.*

CONSIDERING that over three-fourths of the inhabitants of India derive their livelihood from the cultivation of the soil, and the various Governments of the country, inclusive of that of British India, draw a very large proportion of their state revenue from the tax upon it under various names, it goes without saying that the question of land assessments is one of the most important that can be discussed in an Indian Review. It is at the same time one of such vast dimensions that the necessarily narrow limits of a Review article will only suffice to touch the fringe of the subject. To go thoroughly into its minutiae would, however, weary the patience of the ordinary reader with technicalities which only an expert could be expected to understand, and we therefore propose in the present article to confine our remarks to British India, to avoid technicalities as far as may be found possible, and by comparing the main principles that have been acted on in the different Administrations and Provinces in consequence of the varying tenures on which land is held, to give our readers a general idea of what has been done in the way of Land Assessment, and to lay before them for what it may be worth, the practical result of a good many years' experience in forming an opinion as to what should be the main rules for a satisfactory settlement.

One great object of a *Settlement*, to use the usual technical term for the operation, is, of course, to make matters as simple as possible for those who have to act upon it in the future, and to leave them a task as easy as practicable, a task which may to some extent be, so to speak, automatic, and not afford any opportunity for unscrupulous subordinates to misbehave themselves, either with or without the co-operation of others, in carrying it out. A single instance of a native system of

revenue management, a system which the writer of this article had once personally to administer and, fortunately, to supersede, will suffice to prove how utterly impossible such a system was to carry out without leaving a very wide door open for misfeasance on the part of his subordinates. The system alluded to was in force in a Talukah (subdivision of a collectorate) in the Province of Guzerat. The land revenue was levied in cash, either assessed directly on the soil or as the money value of a share of the actual grain produce. In the case of the cash levy the amount varied according to the nature of the crop raised, every description of produce being assessed at a different rate per *bigha* (about $\frac{1}{16}$ of an acre), according to the caste of the cultivator, (Kimbis and industrious agriculturists paying more than Brahmins and religious mendicants and considerably in excess of what was levied from Kolis, Bhils and other unskilful tenants), the season of the year, the quarter of the village, and other criteria laid down in the village *dhara* (customary rent-roll). There was actually one case, and that established by a European Collector in which when the assessment on a higher grade *rayat's khata* or holding, did not amount to a certain annual sum, or a lower grade tenants to somewhat less, the difference between the two had to be made up in cash by way of fine.

So much for the direct cash rents. In the case of grain rents, the share of grain leviable varied in the same way as the cash assessments, with the addition that the actual produce of each field had to be ascertained every year, the estimate being made by Desais, Amien Patels, or other hereditary District Officers either by inspection and examination, in which case it was called *kaltay* or by reaping a certain portion of the crop and ascertaining its amount on the area from which it was taken and multiplying the latter by the total area of the field, the process being then said to be that by *dhal*. The latter system of estimate was only resorted to in the case of wheat grown as a dry crop. In order that a fair average might be

* This article was in our hands long before the Resolution of the Government of India on Land Revenue was issued.

taken, one of the best, one middling and one inferior row were selected from the field, and the grain rubbed out of the ear on the spot and measured. The produce of the three rows was supposed to pay for the cost of estimating, but when the accounts were looked into, a large proportion was found to be given to the village artisans, the village temple, the village dogs, and last, but not least, in providing opium for the consumption of those who assisted in the operation. With such a system, or rather complexity of systems, carried out to the present day in villages of which the land revenue is not administered directly by paid Village Accountants, any detailed supervision on the part of the higher revenue authorities would really be a perfect farce, letting alone the serious inconvenience to the *rayats* themselves of having to wait until some one found time to come round and appraise their crops for them for assessment to the State revenue.* The system, though inconvenient, may be workable when a village is held as a whole by a proprietor or proprietary body, but as far as the demands of the State are concerned nothing short of payment in cash could be allowed. A good deal has been said during the recent times of scarcity as to the necessity of varying those demands in accordance with the nature of the season, but those who advocate this, although with the best intentions, can hardly be aware that if the proposal were adopted, it would really mean a return to the objectionable native methods of revenue management condemned above. It is of the essence of a fair settlement that the assessments should be payable in an ordinary season with a medium rain fall, and leave over and above this in the hands of the *rayat* a sufficient margin to give his land a marketable value. If the State is to derive an income from land, the assessment cannot be reduced so as to admit of payment in a famine year, for the land then produces nothing out of which to meet it, and

an Indian *rayat* who will lay by in a good, sufficient to pay his assessment in a bad season must be very rare. When a *rayat* manages to save, he in the great majority of cases invests his savings in the purchase of jewellery for his wife and family, where if it does not fructify at interest, it is at all events safe and can be made use of in case of necessity as the records of the Indian mints for the last few years would abundantly show.

Having come to the conclusion that assessments to the Land Revenue in India must be in cash and that they should be such as to be easily met out of the produce of the land in an ordinary season and leave a margin for the *rayat* sufficient to make his land a marketable article, let us see what other principles for assessment may be laid down as applicable in all cases, whatever may be the tenure on which land is held. An equitable settlement should aim at placing all *rayats* living so near each other as to be able to compete in the same market on an equal footing, so that under all ordinary circumstances they may not be able to underbid each other in the sale of their produce. It is essential, therefore, that for the purpose of assessment single villages should not be considered by themselves, but relatively to others with regard to situation in the matter of climate and market for the disposal of produce. It is due to the different systems adopted in the different provinces not having been brought under one purview that this point has to a certain extent been overlooked. One of the first requisites of a fair settlement is therefore the determination of the markets resorted to by the whole of the villages coming under it, in order that they may be grouped in classes accordingly. Otherwise, the settling officer who looked merely to the apparent prosperity of a village would be apt to judge too highly of its revenue paying capacity, forgetful of the fact, probably, that that prosperity has been attained to by the expenditure of capital and labour by the *rayats* themselves, to tax which would be contrary to the very principles of equity. There can be no doubt, how-

* It must be remembered that in the days alluded to there had been no regular measurement of fields and the areas themselves were only estimated.

ever, that this has been done in several parts of India. The proper principle was duly laid down and acted upon in every Revenue Survey Settlement in the Bombay Presidency, but it is rumoured, it is to be hoped falsely, that in some of the revised settlements there, all the villages in a Taluq were placed in the time of Lord Harris in the same group notwithstanding their unequal distance from market, and those nearer to market were consequently enabled to undersell those bringing produce from further off, from being put to a less expense for carriage of their produce.

Considerations of climate should also be carefully taken into account in the grouping of villages for settlement. These cannot, naturally, be reckoned in any classification of the soil itself, for after the close of the rainy season, the earth reverts to its dry condition and the effect of the monsoon moisture is no longer traceable in it. Not to rate a village with a certain and ample rainfall higher than one which was liable to constant draughts would be as unjust in a settlement as not to lower one at a considerable distance from market in comparison with those that were near the place where produce had to be sold.

Not only should the principle of raising or lowering according to distance be applied in the grouping of villages, but it should equally be considered in the assessment of the lands within the limits of the several villages themselves.

Every rayat will acknowledge that he values a field close to the village site more highly than one at a distance because, the former can be more easily supplied with manure and the crops in it more closely watched than the latter, which it takes more time to get to and is more liable to the depredations of wild animals: he will accordingly not think it unfair that the former should have to pay more than the latter. In an arid country, moreover, distance from water for cattle is a real consideration in assessing the value of a field, for where water is a long way off, the rayat must lose time in leaving off work in order to take his cattle

to drink: the point was therefore properly taken into account in all the Deccan and Southern Mahratta country settlements.

It is not inequitable even to take into consideration the greater or less agricultural skill of the majority of the inhabitants of a particular tract of country. The lower rates of assessment paid by certain classes described above as having been in force in a certain Talukah in Guzerat are not to be attributed to mere whim or sentimentality, but had its origin in the fact of those who paid lower rates having less agricultural skill. The principle can be carried out, moreover, without disarranging the grouping of villages for market and climate, by not adopting the same rules for assessment of fields according to distance from village sites, when it is desired to lower rates on account of less agricultural skill than usual among the inhabitants of a village. Such castes are not in the habit of manuring their fields and accordingly the increase of rates commonly imposed upon the better classes of agriculturists on account of proximity to village site would not be put on, and a proper allowance would thus be made proportionately to the skill of the cultivator. Similarly, the usual lowering of rates for distance from village site might be accelerated more than in the case of more skilful agriculturists.

More than all things necessary to ensure an equitable settlement are, of course, the accurate measurement of the land and the proper classification of the soil. The latter will be treated of presently under a separate heading. The former must always be a tedious and expensive business, but is worth doing thoroughly, for, once done, if combined with a proper system of boundary marks in the field, it should last for ever and never require to be done again. The cost, however great, will amply repay itself in the entire absence of future disputes. In some revenue surveys, it has been the practise to mark out on the ground only large fields, and to leave the subordinate divi-

of these to be filled in by estimate or eye-scratch, with a view to show an economical rate of working, but the economy is a false one. In places where the State revenue is levied on an entire village or estate, such minute detail as this may not be found necessary, but even in such cases measurement and classification of soils are indispensable in sufficient detail to admit of a fair judgment being formed of the rent-paying capacity of the estates, for the protection of the land-holders as well as in the interests of the Government. In a *rayatwari* settlement, where the tenant deals directly with the revenue authorities, such detail is absolutely necessary, and even in large fields containing sub-divisions belonging to different tenants it must be so minute as to admit of the details being filled in from measurements made by Village Accountants or other local authorities for separate record in the village books, for without this no proprietary title can be considered complete. Where rent-paying lands are intermingled with others not liable to State dues, they must necessarily be marked off separately with distinct boundary marks of their own, however small their area. Boundary marks may be of different kinds according to position. In ordinary unirrigated dry-crop lands earthen mounds at the corners of fields and at the *bunds* in their boundaries are found in practice to be the most durable, for even when worn down by the action of rain, some stones are sure to be left by which they can be repaired. Where land is much subdivided, so as not to leave room for such mounds, masonry pillars or stones may be employed, but these are easily removed and are liable to injury and should be avoided as much as possible. All village maps should be drawn on a sufficiently large scale to admit of the boundary marks being shown on them, in order to facilitate reference and repair when necessary. What were called Revenue Surveys were formerly carried out in different parts of the country, and notably one in the province of Guzerat under the

late Colonel Monier Williams and Capt. Crickshank of the Engineers, but save for the production of some rather pretty topographical maps they have been of no practical use for want of boundary marks to show the division of lands in the field. These surveys are now almost forgotten.

We now come to the consideration of the all important question of the classification of soils, with regard to which it may be said that every Settlement Officer in India has had, and put into practice, his own theory. In estates paying their rentals in the lump through farmers or representatives of a co-parceny, where rents are levied according to native custom, it is, as already remarked, not necessary to enter into such details as are required in *rayatwari* or directly managed villages, but in the latter it is of the very essence of the settlement that they should be attended to in the most minute manner. Our remarks will therefore be directed to the systems in force in Madras and Bombay respectively, where the *rayatwari* tenure prevails. In the former an attempt has been made to do an impossibility, that is, to ascertain the actual produce of each field and impose an assessment accordingly. A few words of explanation will render this palpable. In most villages there is a great variety of crops raised, some with and some without irrigation, at different seasons of the year. So great is this variety that the originators of the Madras system have been forced to resort to the expedient of taking into account only the staple crops of each particular part of the country, and endeavouring by a great number of actual crop experiments to arrive at a fair average estimate of the general outturn of crops for a certain area of land. The soil of each field is according to the published rules on the subject classified under one or other of five various heads—which it is unnecessary to recapitulate here as being too technical for the ordinary reader—and a grain value attached to it. From this point classification and money assessment on the land go together.

The average prices at which the staple grains have been sold in the market for the twenty years preceding the settlement are calculated. From these are made two deductions, one to the extent of a fifth or a sixth to allow for the vicissitudes of seasons, and the other to cover the supposed expense of cultivation, the latter being fixed for the whole presidency on averages ascertained for a series of years from different parts of the country.* After these deductions, the balance is supposed to represent the net value of the produce, of which 50 p. c. or one-half is taken as the Government rent. The land is classified under several heads, supposed to represent different natural varieties of soil, but as these contain among others what is called permanently improved land, which certainly does not exist in nature, an opinion may fairly be formed of the trustworthy nature of the classification. It would be tedious to enter into the minutiae by which a money value is assigned to each sub-division of the five principal orders of soil. The process of subdivision is described as simple and unscientific, eye, finger and thumb being sufficient to guide the classer in his determination, but there follows a proviso, which the classer is allowed to resort to in case of his senses of sight and touch not guiding him rightly, that in our opinion proves how arbitrary the process is. He is supposed to ascertain the quantity of fertilising matter in any soil with regard to which there is a doubt by mixing it with water, and where the residuum that remains insoluble is over 66 per cent to place it in the *sandy* or lowest division of the three in which each order of soil may be classified, all fertilizing properties being supposed to be soluble. Here, then, we have both the system of classifying lands for money assessment and the method of fixing that assessment itself determined on entirely unreliable data.

* The writer is not absolutely certain as to the method in which this average is ascertained. It does not matter much as all such calculations are more or less fallacious, and not applicable under all circumstances.

The above may be termed the positive system of land classification and assessment, and that of Bombay, which will now be described, the relative. Soils are classified according to their natural fertility relatively to each other, and this classification determines only their relative assessment, the fixing of the positive money rate being an entirely separate and distinct process. The method of classification of soils is as follows, and is clearly laid down in what is termed the Joint Report as the one for all Revenue Surveys in Bombay. When the classification of soils is about to commence in a sub-division of a collectorate, enquiry is made as to what is by common consent considered the most naturally fertile soil in it, and from this point as the first class, or sixteen annas in terms of a Rupee, the classification starts. Other soils found by actual inspection to contain more unfertilizing agents, such as stones, lime, sand or salt, than this are classified in a descending scale by lowering by half an anna, or an anna or more, reducing the class to $15\frac{1}{2}$, 14 or 12 annas, or more, according to the quantity of other ingredients discovered. The scale may thus fall until it is as low as two annas, which is found by experience to represent relatively to the best, as low a class of soil as may be deemed arable, or but little better than positively sterile. Classers are trained to work together in this method, so as to attain to as great uniformity in the classification as possible, and there is thus obtained for the whole tract of country to be settled a relative valuation of the whole of the soil. It will be observed that there is no attempt made to ascertain the actual produce of any soil or its equivalent in money for the purpose of assessment, and experience has proved that, although the process is not one of chemical accuracy, the relative values of the soils can be so ascertained as to be sufficiently near for all practical purposes. Instances have occurred in which the classification of a whole village of tolerably uniform black soil has not varied more than an anna or an anna and a half. The relative valuation

having been thus fixed, a maximum rate for the first class soil has only to be determined by an entirely independent process for the assessments of all soils of inferior quality to fall on them severally in accordance with their relative classification.

The determination of the maximum rate of assessment has been said to depend on the arbitrary ideas of the Settlement Officers, but such is by no means the case, their guide to the forming of a right judgment in the matter being in reality the results of previous assessments. If under these the prosperity of the people has deteriorated, as shown by a falling off in the area cultivated and in agricultural stock, and by more than usual remissions of revenue having to be given and realization being made only or mostly by means of coercive processes, it is a sure sign that the general weight of assessment has been too great and ought to be lowered, and *vice versa* where such does not appear to have been the case. The general level of rating being thus determined, the Settlement Officer has to exercise his judgment in lowering that level for considerations of climate, distance from market, backward condition of certain classes of agriculturists, &c., which cannot be provided for in the classification of soils: the test of his qualification for his post lies in the success or otherwise with which he exercises that judgment as an officer responsible to Government, to whom he must state his reasons for all that he does. A certain amount of discretion must necessarily be allowed to a man in his position, but, as already remarked, to affirm that the assessments depend on his arbitrary ideas of what is right is to go far beyond this.

When the general level of assessment is determined on, it has further to be considered whether it is not advisable to leave in the hands of the tenants a sufficient margin to give their lands a market value for sale or disposal to others. It is found that to do this in India (and it may be said elsewhere also where the occupants are not in flourishing circumstances) offers an inducement for needy agriculturists to make use of the property thus

acquired to run into debt, and to unscrupulous money-lenders to take advantage of their necessities and obtain possession of their lands. In order to counteract this tendency and prevent property falling into other hands than those intended, recent legislation in the Punjab, and more recently still in Bombay, has restricted the right of alienation. This policy is one of doubtful promise and its results should be carefully watched before it is further extended, for there can be no doubt that while it may prevent a few improvident men from recklessly incurring debt, it may also tend to check the investment of capital in the improvement of the land. It may be advisable to adopt such a precautionary measure in the case of lands held by members of the wild tribes who have as yet hardly been reclaimed to habits of civilization, but we cannot believe that the more intelligent classes may not be trusted safely with the benefits a full right of property in their land will give them, and the general status of the community be thus raised. Statistics were lately published in the "*Times of India*" which showed that even among the poor agriculturists of the Deccan no very alarming alienation of land has as yet taken place so that it behoves the powers that be to proceed in this direction with the greatest caution for fear of checking the remarkable progress the country has undoubtedly made under the Bombay Settlement system, a progress unchecked until the occurrence of the late lamentable famines. It would be an interesting study to compare the actual results of the two systems thus described in their increase or diminution of cultivation, and as judged by other signs that usually indicate advancing or diminishing prosperity, and we may some day be induced to undertake the task. Our present intention, however, is merely to speak of general principles of assessment, and if the matter were entered into in greater detail we should transgress the limits of an ordinary magazine article.

ALEX. ROGERS.

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A ROSARY OF FAITH

SONNETS ON RELIGIONS OF THE EAST.

THE VERY day the East and the West are being drawn together, are learning to understand and respect each other, and in no domain is this so important as in that of religion. The student of language, the lover of music, will do well to look with sympathy upon all forms of speech and melody, but for him who would watch the aspirations of mankind in all ages and in every land a sympathetic attitude is absolutely essential.

In the following sonnets I have sought to reflect the best spirit of each system, to present the high-water mark of faith as known to the Brahman, the Buddhist, the Moslem, the Sikh, the Sufi and Parsi.

ISLAM.

To thy great names, all one yet ninety nine,
Most merciful, most gracious King of Kings,
Majestic Allah, all creation sings.
The ocean and the ends of earth combine
To call thee Master of the world; yea, thine
The far-flung wills of wand'ring men and things.
Upon the tablet stands the doom that brings
To this man shadow and to that one shine.
The people of the Book so say Amen:
'Tis Kismet, it is Allah, let it be!

We are resigned, and read that leaf of fate;
That all at last shall know the How and When
And Why the waves upon life's foaming sea
Are breaking with the sound: too late! too late!

BRAHMANISM.

O seeker after God, eternal rest
Alone in Self is found! All else is part
Of this great whole. See here, in this my heart
I feel its stream of light and life. No quest
Of first and last can now the soul molest.
For shines not 'neath the veil of soul, athwart
The vast dim sea of space, whose atoms dart
Refulgent through the worlds, supremely blest
The beauty of the Self? No longer now

Do shadows of duality appear.

The sword of being rises; sweet and low
Come murmurs of glad music; crystal clear
The streams of peace upon the spirit fall:
Existence, thought, love, bliss—the all in all!

BUDDHISM.

There is a road that leads to heaven's gate,
A middle way, avoiding all extremes;
But man can only take the truth, it seems,
In fitful flashes, till his soul is sate
With light of Law, the Order, and the fate
Of reaching to Nirvâna, with the dreams
That mighty Buddhas, floating on the streams
Of thought, have slowly shaped into the straight
And noble eight-fold path; high aims, right views,
Soft speech, pure living, resolution strong
To persevere in doing well, to lose
Oneself in meditation and to muse:

To hold truth's spotless eye twixt right and wrong
And point the path: behold the choice and choose!

PARSIISM.

The early dew on Time's broad brow lay pearled,
And all creation, trembling at the sight,
Beheld the splendors of a new-born light,
As gliding, glowing, rosy-red, unfurled
Amid the wonders of a waking world,
The orb of day appeared. The radiant flight
Of countless coruscating spheres, bedight
With opal mists, was watched and hurled
On space by one great Master-Mind. Yea, He
It was, Ahura Masda. Star and Sun
Reflecting only beauty, goodness, love,
His image bore, and kissed both land and sea,
Until black night and shameless Ahriman
Began to breathe out hate below, above!

SIKHISM.

Far down the long, blue canopy of sky
A sound came, like a gentle evening bell:
'O Nānak! Nānak! what was that which fell
In broken rainbows on thy spirit's eye?
Like sweetest music softly sung on high
Comes floating down the ages, pondered well,
The name of names: its secret who can tell?

And how its color cleanseth, sinner why ?
 Upon the forehead of us all is found
 The Lord's great love, the sacred, mystic name ;
 Yes, Hari ! Hari ! Hari ! all proclaim.
 And thou shalt hear His voice above the sound
 Of earthly strife aye ring out true and clear,
 And thy verse sing His praise, Kabir ! Kabir !
 STERISM.

From out the vast and vauntless Void a Voice
 Came falling, falling through the deep abyss :
 ' I am a hidden Treasure, and I miss
 The joy of self-expression and the choice
 'Twixt that which is and that which seems. Rejoice
 I cannot ; there is none to share. So this
 Shall be my high resolve ; with one glad kiss
 Upon the brow of space, without noise
 I will create, and underneath the veil
 Mankind shall see the sparkling of my cheek.
 Thus love sprang into being, and its trail
 Of coruscating glory made man seek
 The union of the human and divine
 And find the secret, Allāh, his and thine !

HERBERT BAYNES.

—i— LOVE COMES TO STAY.

(ANSWER TO "LOVE COMES AND GOES."*)

Love comes to stay. For heart to heart
 Has spoken truth ;—and tho' in life
 Affection e'er is mix'd with strife,—
 Forget we ne'er ; and tho' we part—
 We've lov'd ! Yea ! Yea ! Love comes to stay.

* * *

Love comes to stay. Once we have met—
 In love—tho' for a fleeting time :
 Our lips have kiss'd, our hearts in chime
 Have beat'n sweet ! Can we forget ?
 Nay, nay ! Nay nay ! Love comes to stay :

* * *

Love comes to stay. In Nature's plan
 Eternal constancy I find :
 Suns set to rise ; and not less kind,
 Or constant, is the heart of man.
 Yea, yea ! Yea, yea ! Love comes to stay.

A. P. SMITH.

FRICITION BETWEEN WEST AND EAST : CAUSE AND CURE.

HERE is no denying that one of the most unfortunate features of the British Government of India is the friction between "the rulers and the ruled," and beyond admitting and, from time to time deploring the fact, I do not think any really conscientious or practical endeavour has yet been made to remove, or even appreciably mitigate the evil.

The problem indeed seems one that has "come to stay," and those concerned would appear to place more reliance in the all-curative properties of time than on the utility of special effort. A very careful study of the question, however, in all its bearings, does not justify the idea that matters will gradually improve as the years go by, because, there can be no possible manner of doubt that the friction that exists is due, primarily, to mutual ignorance between the European and the Hindu, and there is no reason to suppose that such ignorance is being dispelled : in fact unhappily the contrary appears to be the case.

It would have been thought that the race of Nicholsons, Munros, Metcalfes, and Lawrences and such like men, who lived close to the people and studied their customs and manners with all the industry of enthusiasts, and all the care and observation of philosophers, would have been perpetuated, or that, at least, their successful example would have proved useful to coming generations of servants of the Crown imbued with the Imperial instinct, but I think the contrary is nearly everywhere to be seen, and that we are, if anything, owing to causes not exactly under our control, getting further away from the people—a fact which is deplored by nobody so much as by the people themselves.

Of course, when writing impartially on the subject, one cannot be oblivious of the fact that there have been causes at work contributing to this result, and it has also to be conceded at the

* Published in the Indian Review dated October 1901.

outset that the European (official or otherwise) has not altogether purposely kept himself aloof from the people, although he has not unfortunately at the same time made any apparent effort to neutralize the disadvantages (to India) of his present environment.

Necessity, it is said, is the mother of invention: It is also the origin of much else. In good old John Company's days the European was, in a measure, compelled to learn all about the people, because he had, every day of his life, to deal directly with all classes of them, and this without the help of a reliable interpreter or *dubash*. There were no English-knowing Head Clerks in those days. Naturally, therefore, apart from purely business matters, much other useful information was also acquired. There is little or no necessity for such laborious, though useful and informative, process now, and it is only the few who care to know something outside what is entombed in ponderous Blue Books or other official publications, that make any real or successful endeavour to learn something of the character and habits and customs of the people. The Suez Canal too is responsible for much. Formerly the European came out to make India his home. During a long service he could pay a visit to the old country perhaps only once, and that with luck. The opening of that waterway has undoubtedly given a tremendous impetus to commerce, but, paradoxical as it may seem, it has brought England and India closer together only to separate them the more. The whole idea now is to qualify for privilege leave and run Home, an impossible undertaking previously, and much leave-taking is also, in a measure, the cause, necessarily, of many transfers. The Collector of Coimbatore goes on leave to find himself posted on return to Vizagapatam, and the Sessions Judge of Malabar takes his short respite to learn, when it has come to an end, that he has been gazetted to Kurnool, and this goes on all over India. It is easy to see, therefore, how little can be the opportunity for local learning unless

there is a special desire. These remarks should be borne in mind by those who would put all the blame for any friction that exists upon the Government.

From what has been said above it must appear that time is not likely to be the solvent of the problem, because things are tending to get worse, certainly not to improve, and in our own generation have we not seen the Civilian growing less desirous of studying the people and more and more anxious to complete his service for pension or his period of "exile" and return to the old Home from this so-called "Land of Regrets?"

Before, however, bringing forward into the field of practical politics any remedy, the existing state of affairs calls for further consideration. It has been pointed out in the first place that the present-day European knows little of the native by *actual contact*, and has less opportunity for acquiring information than the Civilian of the olden time. This ignorance, it must be admitted, cannot but breed other evils, and one of its by-products, so to speak, is misrepresentation (readily accepted) which has done a great deal to widen the breach between "the rulers and the ruled."

The present-day Civilian is not, I think, inferior in mental capacity to former rulers. Believing that the hour makes the man, if there were more Empire-building to be done, or more Mutinies to quell, I feel sure he would be found equal to the occasion, and latent talents would soon show themselves; but a Sir John Woodburn or a Sir Mackworth Young do not know the native as Edwardes and Lawrence did: they judge him more from the exterior, and when destructive and short-sighted speakers stand up to neutralize the "leaven of the Pharisees," or in other words to discredit the Congress by abusing and exposing the native character, there is nobody of position or power to disprove their statements except those few Englishmen who have too closely associated themselves with native interests to be regarded as independent witnesses.

From ignorance and misrepresentation to race-hatred and antagonism is an easy and natural step, and so the evil grows.

It is incumbent therefore on those who are in positions of authority, and who can lay claim to the confidence of the people, to use their influence in those directions where it can be beneficially employed, and I write this article to make a special appeal to all such and trust that it will not altogether be a case of a "voice crying in the wilderness."

From what I have said it will be seen that I base my hope on the dispelling of ignorance and a better understanding of the people; nor can I imagine that practical politicians will find fault with this.

Love or good feeling was never founded on contempt, and it is not possible to suppose that any appreciable change in the relations between the white man and his Indian fellow subject can ever come about unless and until it is established to satisfaction that the native is not as black as he is painted. For years and years past the Hindu has been discredited; and all manner of aspersions cast upon him until he has been left with practically no character at all. Dirt will stick, and to give one instance, as Max Muller in one of his best and most instructive essays says, the Hindus from long years of continuous and un rebutted calumny have come to be regarded just as much traditional liars as are all Frenchmen frogs, all Italians assassins, and all Germans dirty. Is it to be expected then that Englishmen could entertain for the people of this great continent that respect and good feeling that one great, courageous, chivalrous people feel for another? It is easy to see therefore in what direction the remedy lies.

The young Englishman, whether official or otherwise, tends to think himself among a set of weak and effeminate "Baboos," nearly all of whom who are not clerks are scheming Vakils, or disappointed conductors of the Native Press. He goes through a long service in the course of which he certainly

does come in contact with *many* natives, but meets them principally in the Revenue or Judicial Courts or other offices over which he presides. The other natives are his subordinates, from clerks up to Deputy Collectors, and some vakils, merchants ignorant of English, schoolmasters, and landholders who are members of Taluk or District Boards. He is required to pass in the Vernacular which he does, but never, with very rare exceptions, knows sufficient to converse freely with the native or understand him, and is generally diffident to speak the "Lingo," unless it is Hindustani, and he is a Robert Sandeman, or a Colonel Warburton. I may here very appropriately quote from a recent lecture by Mr. J. D. Rees: "To me it is inexplicable" he says, "how any officers other than native writers in the Secretariat, can possibly perform in an efficient manner, the functions of an Indian administrator, without a far greater knowledge of the Vernaculars than is required for passing the compulsory Standards," and Mr. Rees ought to know what he is speaking about. It is not difficult to understand why, under these circumstances, a true estimate of the people is not obtained, and why on the other hand very many erroneous opinions are formed.

Clerks and those one comes into official contact with are not the most desirable of instructors. To study the native and to learn all about him it is necessary to go and see him in his village. That is the only place where first-hand can be obtained an insight into his real character, his manners, and his habits.

I do not contend that the native is altogether a different being from what he is represented to be. He certainly has not some of the better qualities of the European: the national character has undoubtedly suffered from the many foreign invasions which have scourged India, and the less manly races have naturally been most affected; but a closer association will bring with it many agreeable surprises and demonstrate, beyond all doubt, the possession by the native of many virtues and

some really noble traits of character that would be prized in the most civilized of European countries. There must be considerable abandonment, however, before this can happen, of long cherished prejudices. Kossuth, I think, has said that if you put an Englishman and a Frenchman on a savage Island and returned after a year, you would find the Frenchman painted and feathered like one of the inhabitants, but the Englishman would be Lord over all. The Englishman is Lord over all in India and is, at the present time, politically dynamic, but it may not be so always, (and is there no sign at all, even now, of the small cloud, no bigger than a man's hand on the horizon?), and the day may come when what the sword is not potent to keep can only remain safe, in the determination of a contended and happy people, that the British Government of India shall endure.

Foremost then, if there is a determination to bring about a *rapprochement*, must be the resolve to put away that chiefest of all human littlenesses, pride of birth. To come to India with a preconceived idea of superiority over the native is not conducive to the cultivation of a genuine friendly feeling, nor is it possible to study the native when it is regarded as lowering to associate with him; and when every infraction of this rule by sympathisers here and there is openly discountenanced and even punished with social ostracism. It is perhaps an unpalatable fact, but there are natives in India just as blue-blooded, as the best of England's sons, and young Englishmen arriving in this country must be prepared to accept this fact and shape their subsequent behaviour accordingly.

There is no doubt that the great variation in the domestic habits and customs of the two people is a considerable bar to their close association, and mutual ignorance of these differences produces much misunderstanding. There is an old story of a Civilian who trying his first case, and seeing, native Vakils and others coming into his presence

without removing their *turbands*, threatened to have them all up for contempt of court! I do not see, however, that there are any insurmountable difficulties in the way. The Englishman who now objects to travel in the same railway carriage with a native would soon forget his prejudices, if he only considered for a moment that his customs and habits are perhaps quite as objectionable to his native fellow-passenger as the latter's are to him. All that is required is the adoption of a "give and take" principle, and the very unseemly quarrels that we hear of from time to time would cease. It is not to be expected that Government can do anything in a matter like this, and there is no attempt on my part in writing this article, to comment on the actions of Government or to offer it advice: that would be an impertinence. Like the Drink Question, the matter with which I am dealing is one that cannot be put right by Act of Parliament, or Viceregal edict. It is only a sense of fairness and humanity that can do it, and this is merely an appeal from man to man, in the interests of the two interdependent countries, England and India. Yes, the question must be left for settlement to the parties concerned. Friction is acknowledged to exist. The lubricant naturally ought to suggest itself and be applied.

Apart from this, however, there are hundreds of ways of moving closely with the natives without subjecting oneself in any way to inconvenience, and so far as I have studied the question, all that is required is the removal of the initial prejudice to which I have referred.

The vision of the Poet may be far off:—

When the war drum throbs no longer;
When the battle flags are furled;
In the Parliament of man;
The Federation of the world.

There is political and administrative necessity nevertheless for this brotherhood between "the rulers and the ruled" that I am striving after. We cannot look into the womb of the future, and we cannot safely prophesy what is to be the ultimate fate of this great India of ours, but it must be

patent to the poorest intellect that at present we are not altogether going about things in the right way. Let us then hand in hand tread the paths of peace and progress together, two great people, united by common interests and common desires, sinking all differences, acknowledging whatever of benefit or of happiness one has obtained from the other, and pressing forward in the race of nations towards the rising dawn of another, and a more glorious day. Then surely can be asked with propriety, *quis separabit?*

ANGLO-INDIAN.

—i—
PEACE ON EARTH.

Two thousand years have passed since He
The saviour spirit walked in human form,
And yet, how sad the sight we see!
What horrid notes of yell that break the calm!
How reigns the cannon's roar supreme,
How shriek and fall the men His cross atoned,
And vanish all as fruitless dream
Sharp struck by those for whom their Lord be-
moaned;

And sent as though to say to Him
That Peace on Earth is base as cruel lie,
While flows the crimson flood to brim,
And peace from carnage comes, in heaving sigh!
Two thousand years have gone since He,
Refulgent Sire, the crown of sorrow wore
That man to man may brother be
And love as children true the Father bore.

And still the bitter scene behold
That man to man and race to race oppose
With clenched fists that daggers hold
And hurl one another from their repose.

"To war! To war!" see how they cry
Like hounds of worlds forlorn that own no Law
That would nought else but fury try
And keep their peace when just they overawe!

Two thousand years have gone since He
The Light of Life proclaimed the law of life
A love of Man; and yet we see
The years but perfect all the modes of strife!
But one the creed and that was love,
But one the thought that now awaits—
Destroy—

O! Pray for mercy from above
That life is more than playing cannon's toy.

VYAS.

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MYSTERIES OF ANIMAL LIFE.



MASON WASP.

IN spite of the crowd of fresh facts relating to animal life which yearly come to light, the unknown meets us at every turn. Here, as elsewhere, take what direction we will, the boundaries of knowledge are soon reached; beyond is the undiscovered country awaiting the explorer. In the first place, life itself is an enigma. Of the specks which the microscope reveals in a drop of ditch-water, why does one move, feed, show signs of consciousness, and even of having a will of its own, while another, which seems its counterpart, is inert as a particle of dust? Life so far evades all who would learn its secret. It seems likely that the simplest animals, mere living points which, unmagnified, we see with difficulty, or not at all, existed first of all. But to ask how they sprang into being is to seek to lift the veil from the unknowable. Some have fancied that in non-living matter the spark of life might, under certain circumstances, be self-kindled. More than once the sea-depths have yielded to the dredge a formless, structureless slime which showed signs

of vitality. The spirit of being could take no simpler guise; the beginning of all conscious existence seemed to be embodied here. Be that as it may, *amœba* is not far from being the expression of life's problem in its simplest terms. But *amœba* is only one of the mystical forms of life, whose existence, but for the microscope's aid, would be unknown, perhaps unsuspected. Hosts of bacteria come into view, so small that they hover on the border-line of invisibility, even when magnified by our strongest lenses. But number is strength, and in addition to carrying disease half round the globe, their agency has been traced in so many processes of fermentation and decay, that we shall not be far wrong in looking upon microbes, rather than men, as the rulers of creation.

In what mysterious way does the dreamy life of a plant differ from the wide-awake existence of an animal? Is it in quality, or only in degree? Wordsworth believed "that every flower enjoys the air it breathes." In colder countries than ours an annual ebb and flow varies the life of the furry tenants of the woods. With the first winter snows bear and beaver sink into the same trance of hibernation. Even the brisk squirrel feels the drowsy touch of "Death's twin brother, sleep." All the more marked is the spring awakening. Bird and beast enter gladly on a new lease of existence. Beneath the bark the sap rises once more, as if even the life of the tree were stirred by the pulses of the spring. There are some curious cases known in which organisms requiring moisture have survived years of dryness. Amongst the minute denizens of pond or ditch water the rotifers may be seen twirling their filmy wheels. Placing some of the water in a saucer, we let it evaporate till only a scum, dry as dust, is left. Months may elapse before we take a little of the sediment, moisten and magnify it, when in a few minutes it swarms with rotifers once more. Life did not take flight, but slept, waiting for the better times which the coming of the moisture brings. A new generation of wheel animalculæ springs at once from the dust of

their predecessors. In the case of dried-up thread worms the spark of life has been known to linger for fourteen years.

The apparent waste of life is in many cases a puzzle. The germs of existence are scattered with lavish hand only to ripen into beings whose lot is speedy extinction. Of a million young oysters not more than one grows up to tempt the palate when offered on the shell. The roe of a single codfish has been computed to contain nearly ten million eggs. The chance of any one of these giving rise to a fish which shall reach maturity must be infinitely small. The queen white-ant may lay eggs for months at the rate of some eighty thousand a day, but, happily, the enemies of the young termites are numerous in proportion, or every foot of African soil would be hidden by a covering of white ants. We may well ask why there is this waste of material, this unstinted wealth of creations which have no sequel. Of the myriads of may-flies which spread gauzy wings as twilight settles on the mere, few will see the morrow's sun. Slowly growing as grubs below the surface of the water, they change to their final form only to enjoy a few hours of winged aerial existence.

In many of the lower animals life seems to reside equally in all parts of the organism, and to have no special seat, as in the heart or brain of higher forms like ourselves. If the little fresh-water hydra is cut into pieces, each part may grow into a complete individual. From one of its arms, shed or severed, the whole starfish may be renewed. And to snip a worm into pieces may be the means of multiplying the species, each portion supplying, by growth, the missing parts. But creatures higher up in the scale than worms seldom possess this capacity. The lizard shakes off its tail as it escapes, and the separated member is left wriggling in the hand of its would-be captor. But the tail never re-grows a lizard.

No one can study insects without finding much to wonder at, and coming across problems which are not easy to be solved. The why and the

wherefore of their doings often remains a mystery. The butterfly knows the proper food plant for its caterpillar offspring which it will never see. The white butterfly makes no mistake, but lays its eggs upon cabbage leaves, or is a sufficiently good botanist to choose a plant so nearly akin as to answer the purpose equally well. The mason-wasp stores its mud-built cells with spiders or caterpillars as food for the grub when hatched, but, lest the provision should decay, stings each victim, so as to paralyse, but not kill it. Amongst the hidden things which we have yet to fathom are those changes of form which make the early life of an insect a series of disguises. For each act not only is the costume different, but the whole body is fashioned anew.

The resemblance between an insect and its surroundings is nothing short of marvellous. The caterpillar of the swallow-tail butterfly, having reached its full size, stops feeding upon the leaves of the marsh-parsnip, and fixes itself upon some part of the plant, in readiness for the change to the chrysalis state. If the chosen spot is amongst the leaves, the chrysalis is green and matches them in colour. Other caterpillars select the stems, and in this case the chrysalis appears in a tawny or yellowish livery, just the hue which the stems assume when dry and dead in winter. In both cases the resemblance is protection. The caterpillar, in some subtle way, feels the influence of its surroundings, which, however, only affects it when it is about to change. The result is harmony of colour, but the difficulty is to know how the influence makes itself felt! Not a few insects find safety in false appearances. Whether we can justly accuse them of fraud must be an open question, but if the object is to pass for something different it must be admitted that the "get up" is often perfect. An Indian butterfly settles upon a bush, closes its wings, and in shape and marking is the counterpart of the leaves around it. Other insects masquerade as bits of stick, sprigs of moss, and walking leaves. The mimic has selected a

model, which it has so nearly succeeded in imitating, that the likeness is ridiculous. The resemblance cannot have been acquired all at once, but must have grown by slow degrees in the course of generations. But the obscure point is how did the resemblance begin, and how has it been improved? The explanation usually given is, that the insect which looked least like itself and most like a bit of stick, to select a single case, had the best chance of surviving, and thus of leaving offspring to inherit its peculiarities. This may be the clue, but quite possibly other factors may have been at work.

The question has been raised whether insects, and animals in general, enjoy life, or whether their spirits are depressed by the difficulty of making a living and escaping from their numerous enemies. Even a bird may have its grave moments when it reflects that grubs are scarce and competition keen. The hard won winter store of ants and bees is theirs, only as long as they can defend it, for here the good old rule still holds "that they should take who have the power, and they should keep who can." But Nature is not wholly a scuffle in which the beaten pay as a rule but one forfeit—that of their lives, any more than it is a universal song of praise. That the struggle is at times keen no one can doubt. The weak have in many cases combined for mutual aid, and this bears witness to the fact. By this plan, competition within the limits of the colony is at an end. Every member is strong in the support of the whole community. The end is not attained without one drawback—the individual loses personality, and is of no more consequence than the smallest rivet in a vast machine. But for the triumphs of co-operation let the ant give evidence. Our wonder grows as we find it as soldier, architect and agriculturist, distancing all insect competitors. No better illustration of the superiority of mind over matter could be given than that of a party of ants dragging a juicy caterpillar to the nest. Darwin might well speak of the ant's brain as one of the most marvellous atoms of matter in the world.

Perhaps the advance which ants have made in civilization, is due to their discovery of the art of exchanging ideas. They have found in touch a means of communication. Further, there is little doubt that ants are conscious of light and sounds beyond the range which our own senses can appreciate. Spiders have been seen to signal to one another by vibration of their web lines.

The secrets of insect life are only to be learnt by careful watching, but the ways of birds are thrust upon the notice of us all. Yet here again there are problems to be solved. Much has been written and said about the flight of birds, but it will probably be many years before we hear the last word upon the subject. General explanations will not apply to such special cases as those furnished by the soaring eagle, the hovering kistrel, the albatross sailing on motionless wings. Upon the theme of bird migration volumes have been written, but at present we cannot say whether instinct or recollection, or a combination of the two, is the lodestar which guides the wanderers, often through darkness and tempest, to their certain goal. What is the mainspring and motive of bird song? Is it love, or the mere expression of vigour and delight in being? We are equally unable to say why the callow young of thrush or pigeon are helpless, while the partridge runs and the moor-hen takes to the water as soon as hatched. The chick no sooner shakes the shell than it shows evidence of inherited instincts and activities. These furnish an interesting but puzzling field for the observer. There is an innate impulse towards scratching the ground; fear of the hawk is not learnt but seems to be in-born in the same way, for chickens exhibit it which have never seen the hen. But to embark on the fascinating subject of instinct and intelligence would carry us too far, for the mental processes of animals, unlike our own can only be matter for conjecture. There is a charm in seeing the first ray of light illuminate some corner of the unknown, in finding bottom where previous navigators have heaved the lead in vain. And the day is still far distant when all the riddles will be read.

J. H. SALTER.

THE MADRAS COURT OF WARDS AMENDMENT BILL.

THE Madras Court of Wards Bill is a legislative measure of considerable importance, and is set down for consideration at the next sitting of the Legislative Council, the Select Committee which was appointed to report upon the Bill as originally published having submitted a report making few material alterations in the Bill. The Bill is framed with a view to consolidate and amend the law relating to the Court of Wards in this presidency and in so far as the additions it makes to the existing law and the repeal of some provisions thereof are concerned, it has elicited strong disapproval and protest from thoughtful and well-informed persons whose opinions ought to carry weight with the legislative body. Under Regulation V of 1804, where a person is incapable of managing his or her property by reason of minority, lunacy, idiotism or other natural infirmity, the Court of Wards can take charge of the property and assume the management for the benefit of such person. By Act IV of 1899 it was enacted that a proprietor not coming within the class above specified, may on his own application get himself declared an incapacitated proprietor, if the Local Government is satisfied that it is expedient in the public interests that his property should be managed by the Court of Wards and the Court of Wards may in such cases assume charge of his estate.

In the Amendment Bill now before the Council it is proposed to still further extend the law by empowering the Local Government to declare proprietors incapable of managing their property owing to any physical or mental defect, or infirmity, rendering them unfit to manage their property. Thus by the consolidating and amending Bill, a proprietor who is not a minor, lunatic or idiot, may if he is so inclined ask the Government to manage his property for him or even when he is

unwilling to hand it over to the management of the Government, the Legislature empowers the Government to remove him from possession and management, and to take the custody thereof itself. This kind of legislation is impolitic and inexpedient to the last degree, both in the interests of the class for whose ostensible benefit it is proposed and in the interests of the public at large. The Honourable member in charge of the Bill states that "the sole aim and object of the provision is the preservation of our ancient, permanently settled estates," and that "whether, as a matter of State policy, it is of much importance, that our ancient Zemindaries should be preserved is, as we all know, a point on which opinion has been divided for the last hundred years." It may be conceded that the existence of a landed aristocracy is very useful in the economic condition of a country and that in any event where such a class already exists, reasonable measures should be devised to prevent the deterioration of that class. At the same time it ought to be recognised that the measures taken to keep up the members of this privileged class in their allotted station should be such as not to impair the grounds which form the *raison d'être* for their existence, and legislation of the kind now proposed is distinctly destructive of this principle. Referring to the class of Zemindars in, "The Progress of the Madras Presidency during the last Forty Years," published in 1893, the author observes :

"Brought up in the old traditions, with no sphere of public usefulness open to them to develop their better qualities or enlarge their minds, they have hitherto with some notable exceptions, formed an idle and dissipated class. Recently, however, a change has become perceptible. Several of them are being educated, and the proceedings of the Landholders' Association recently organised, distinctly show that they are beginning to realise their duties and responsibilities and to feel that if they do not rise to the requirements of the present regime, they will lose all social influence and importance and be doomed finally to disappear. With the great increase in population and expansion of export trade, the necessity for better methods of cultivation, such as those which only rich landlords have it in their power to adopt, will become greater and greater, and a sphere of usefulness will be opened out to them in this direction as

well as in the management of industrial enterprises which peasant proprietors cannot be expected to undertake. It would therefore not be right to judge of the future usefulness of this class from what they have done in the past: and if they could be assisted to maintain their ground without the aid of legislation of any drastic character involving violent interference with private rights and weakening motives of self-help, it would, it seems to me, be good policy on the part of government to afford that assistance."

The principle indicated in the last sentence is the chief ground of objection to the enactment of the proposed law urged by the Rev. Dr. Miller who has pointed out that the proposed legislation will do more harm than good, will tend to weaken the moral fibre of the classes whom it is intended to affect and depress their ideal. In attempting to legislate upon this matter the Government ought to take stock of the tendencies of the time, and the agencies which are naturally at work for the development of a country. They ought not to prefer an immediate small gain to an evil of great magnitude in the long run. In the words of J. S. Mill:—

"A government cannot have too much of the kind of activity, which does not impede, but aids and stimulates individual exertion and development. The mischief begins when instead of calling forth the activity and powers of individuals it substitutes its own activity for theirs; when, instead of informing, advising and upon occasion denouncing, it makes them work in fetters or bids them stand aside and does their work instead of them. The worth of a State in the long run is the worth of the individuals composing it, and a State which postpones the interests of their mental expansion and elevation to a little more of administrative skill, a State which dwarfs its men in order that they may be more docile instruments in its hands even for beneficial purposes will find that with small men no great thing can really be accomplished and that the perfection of machinery to which it has sacrificed every thing will in the end, avail it nothing, for want of the vital power, which in order that the machine might work more smoothly, it has preferred to banish."

The reason for the law is stated to be that "it is desirable in the public interest that our ancient Zemindaries should if possible be preserved from ruin" and there is no doubt that the origin of it was the benevolent wish of the late Governor of Madras to save from ruin the Zemindaries of Kalastri and Karvetnagar at the time Act IV of 1899 was passed. The provisions of the Bill, however, embrace landowners of all kinds and degrees. A person whose chief occupation is

merchandise and whose wealth is in the shape of moveable property but who happens to own one acre of land will come within the grasp of the new law. No intelligible reason has been assigned for this wide extension of the powers of the Court of Wards and of the Government, except the grotesque principle contained in the Honourable Mr. Winterbotham's statement, that he is "legislating for posterity," and that,

"It is expedient in the Bill to provide for contingencies which may be regarded as remote or of very rare occurrence and to give powers which it may be never necessary to exercise. The rider may never have to use either spur or whip or curb, but if he rides without them, every one will see that he is not properly equipped and one of his horses may some day take advantage of the rider's helplessness and set to and back."

The above passage shows with what complete misapprehension of the principles on which codification should be made, our Legislators proceed to enact laws. As codification has the inevitable effect of stereotyping the law and the conceptions and habits upon which it is founded, it is of paramount importance that it ought to confine itself to the practical needs of the moment, and should not hamper social progress by an artificial barrier. It is also clear that no class in the community should be arbitrarily subjected to 'special legislation unless there are exceptional circumstances justifying the same, and if it is expedient to enact a law in respect of a particular class of the community on that ground there can be no justification for extending such law to all the other classes of the community. Assuming that as a class the Zemindars who like "lilies of the field, toil not, neither do they spin," are in such a hopeless condition that even after reaching manhood they cannot realise their responsibilities, and become fit to manage their own concerns, and from their cradle to the grave, the Government must ever be on the alert to relieve them from the burden of their estate, can it be pretended that such a law is necessary at this time of day for the general body of the Indian community. It is ridiculous to say that though the law is not at present necessary, our posterity may require it and there-

fore it may be enacted. Nobody has the right to mortgage the rights and capacities of our posterity. A learned writer says:—

"Even those of our people who are neither readers of history nor students of the science of politics are beginning to understand that the silent and irresistible law of growth which expands the girdle of the oak, is an equally irresistible law of the natural life which neither legislators, jurists, nor sentimentalists can suspend or control."

The fact is as pointed out by Sidgwick in his *Elements of Politics*:—

"An ideal legislator ought to know law as well as the lawyer but he ought to know much more than law. He must have an insight into the actual relation of the laws to the social life of the community regulated: the manner in which they modify the conduct of the individuals whom they affect, the consequences, proximate and remote, that are likely to result from any change in them. To obtain this insight he ought to have such an acquaintance with particular facts as it is difficult to obtain otherwise than from actual experience or at least from intimate converse with men of experience: and he ought also to possess *such* knowledge as is obtainable of the general tendencies of social development and the effects of different social causes. Taking men as they are, we shall hardly expect to find many whose knowledge qualifies them for dealing in a statesmanlike manner with all the problems presented to a modern legislative body."

The *Madras Law Journal* has given its approval to the extension of the jurisdiction of the Court of Wards proposed to be conferred by the Bill, though it strongly condemns the withdrawal of the jurisdiction of the ordinary judicial tribunals, with regard to the exercise of the power. It points out referring to an article in the *Law Quarterly Review* for 1901, that in most of the countries of Europe there is a provision of law by which the estate of prodigals may in certain circumstances be taken charge of by the State. The systems of law in which this provision exists have derived their inspiration from ancient Roman jurisprudence and as the same article in the *Law Quarterly* shows, this law took its origin,

not from a desire to protect either the State or the prodigal, but to prevent the prodigal dissipating what was not his, but his family's or clan's. When we first come across the law of prodigals, it was not directed against extravagance as such, nor to protect the State, but to protect property, which was really common property, from the extravagance of the person who actually had possession of it—in other words, to protect the property rights of innocent third parties."

The last is indeed a sound and intelligible

ground upon which may be justified the act of interfering with a man when disposing of or dealing with his property. It has also to be borne in mind that the law as proposed to be enacted by the Court of Wards Bill is much wider in its scope and application than the law of prodigals obtaining in some of the European countries. And further the latter is hedged round with many restrictions and safeguards to prevent its being abused. It is also a noteworthy fact that this law has not been enacted in England in any shape or form. It is difficult to see why in the case of a piece of disabling legislation, we should travel for parallels to countries other than England, in the continent of Europe, especially in the absence of a proved practical necessity for it, as the speech of the honourable mover of the Bill shows. The laws and conditions under which Englishmen live are said to develop to the highest extent their individuality which is the mainspring of their nation's greatness. In an excellent article on "American opportunities and education," in the *North American Review* for November 1901, the writer says :—

"The English speaking races are holding their places and doing their work in the world to-day, by virtue of their political education: they, are everywhere the representatives of that full development of individuality, that free play of personality, which involve definiteness of aim, concentration of will, courage adequate to all emergencies and the power of standing alone and if necessary dying alone at the place where one's work is to be done. This is the reaction on character of a form of Government and a body of political institutes which have constituted for many centuries, a school of popular education, political in form but vital in essence."

The next important change is that effected by S. 49 of the Bill which says that 'no declaration' made by the Local Government under section 9 or 19, and no act done in the exercise of any discretionary power conferred by this Act, shall be questioned in any Civil Court. Under the existing law contained in Regulation V of 1804, the decision of the executive officers of Government by which estates are taken charge of by the Court of Wards are liable to be questioned in a Civil Court, and officers who are found to have wilfully abused

their position and powers are liable to civil and criminal penalties for their misdemeanours. The present Bill takes away the protection which aggrieved persons hitherto had to have recourse to the judicial tribunals to investigate the matter, and also confers complete immunity upon all agents of Government in respect of their acts. Thus while the powers of the local agents of Government were far more restricted, the decisions of the latter could be upset by an appeal to the ordinary Courts, and they themselves could be made to account for their misdeeds. The proposed law gives them more extended powers, and a discretion uncontrolled by the courts in the exercise of those powers. It is admitted by the Honourable Member in charge of the Bill that the right of going to the Civil Courts for redress possessed by aggrieved persons has not been hitherto abused. It is therefore impossible to understand on what grounds is based the policy of the Local Legislature to take away the jurisdiction of the judicial tribunals whenever an opportunity presents itself. For it can be easily demonstrated that such is their policy. It began for the first time, when a suit for damages was successfully instituted against the Madras Government for wrongfully removing Mr. Vijayaraghavachariar from his office as Municipal Councillor. At the earliest opportunity when the mofussil Municipal Act came to be amended, the Government seized the occasion to insert a provision in the Act whereby they were constituted sole judge to determine who shall be appointed Municipal Councillors, who shall be deemed elected, who shall be removed from the office and so on. Under the power conferred by this Act, the Madras Government in a recent case declared a person who had secured a majority of votes, ineligible to be a councillor on the ground that he had been convicted of assault. Other instances might easily be enumerated which exemplify what J. S. Mill describes as, "the evil effect produced upon the mind of any holder of

power, whether an individual or an assembly, by the consciousness of having only themselves to consult." The Madras Irrigation Cess Act passed in 1900 is another instance of local legislation in which when the acts of the Executive Government were declared to be contrary to law by the High Court, the Government got the Legislature to enact their own views to be the law of the land, and barred access to the Civil Courts for redress in the matter. It is therefore abundantly clear that the powers of the Executive are being excessively enlarged so as to encroach unduly on the domain of the judiciary and this cannot but have a most pernicious effect on the general administration of the country. The besetting sin of the officials in this country seems to be to overrate their own individual powers for doing good to the community, to forget that they are only units in the administrative machine, and to assume that the intention with which a law is framed is to determine its consequences. As a matter of general principle, as Mr. Sidgwick observes :—

"It is necessary for the maintenance of law and Government, to invest the executive with rather extensive powers of interference with the liberty and property of private citizens. While at the same time the security of the latter requires that their powers should be exercised as far as possible under strict rules and limitations. It is therefore important that the private individuals who suffer from their exercise should have the right of appealing as soon as possible to an independent and impartial law Court in the case of any alleged transgression of these rules. The chief constitutional regulations established with a view to this result, are indeed commonly recognised as the most important protections of civil liberty."

Section 9 of the Bill empowers the Local Government to declare a person incapable of managing his property and under S. 15 direct the Court of Wards to assume the superintendence of the person or property of the proprietor or of both, if it considers that the same is expedient in the public interest. There is no definition in the Bill of what is to be deemed in the public interests, and the Government acting through their local officers are the sole arbiter in the matter. Under S. 24, the Court of Wards may make such orders

and arrangements as to it may seem fit, in respect of the custody, residence, education, and marriage of any person whose person is under its superintendence. Thus under the proposed law even in the case of a person who is *sui juris* and in full possession of his faculties the executive is empowered to take possession of his property and to restrict his personal liberty and freedom of action. It cannot be questioned therefore that the powers given by the Bill are of an immense range and we have to rely on the wisdom and discretion of the officials for the exercise of those powers within proper limits. The majority of the select committee assert that the 'apprehensions,' which have been, as they say "widely expressed in regard to the possible misapplication of clause (d) of section 9, are 'exaggerated,' and fortified in the security of their own belief have made but few and immaterial alterations in the terms of the Bill as originally published. In a minute written by him in 1880, Sir Henry Maine said :—

"I have often heard the valuable public servant lament the decay of "patriarchal" administration. He regrets the growing number of rules which abridge his discretion, and which he must obey under penalty of rebuke from his superior or from some court of Appeal. And I have noted that he is exceedingly apt to give the name of English law to the rules he dislikes. There is, in fact, a conflict always, more or less proceeding in India between two systems, each excellent in its place—the reign of law and the regime of discretion. For my part, I have the strongest sympathy with the preference of some Indian officials for discretionary administration, where the people have not out-grown it. But it is vain to deny that this system is inconsistent with even a slight advance in the people to which it is applied and that thus the area over which it is applied is constantly diminishing. In the first place unless it is to degenerate into loose and capricious tyranny, it demands great industry and great conscientiousness in the men in whose hands it is placed and though these qualities have often been found in a large number of Indian officials, they are not the less on the whole, rare qualities and there is no perennial or unlimited supply of them. Secondly the discretionary administration of justice is incompatible with a high or even a moderate degree of commercial activity, for this imperatively demands, strict uniformity in interpretation of law, and particularly in the construction of agreements * * * Lastly, I believe the regimen of discretion to be thoroughly unpopular with the natives of India. I have never conversed with an educated native of India, who did not seem to abhor it, but I do not rely so much on this as on the evidence of a similar feeling in other and much more numerous classes * The Bill of which a portion became the land Revenue

Code (Bombay Act V of 1879) had much to recommend it, but if ever there was a real popular effervescence against proposed legislation, it showed itself in respect of this measure. And the popular grievance was that the discretion of officials was enlarged by it at the expense of the jurisdiction of the Courts of Justice."

It will be admitted, I trust, that nothing could be more apt and deserving of greater weight and authority to support the objections to the terms of the Court of Wards Bill on the point we have been considering, than the above observations of Sir Henry Maine.

The provisions of the Bill, according to which the rights of creditors of a disqualified proprietor are allowed to be overridden in various ways by the Court of Wards can only be briefly noticed here. The memorials sent up by the Trades' Association and other bodies of Bankers and Merchants of Madras ought to have convinced the Government of the general feeling of insecurity which the provisions of the Bill relating to contracted obligations have produced among the mercantile community. It cannot be regarded as expedient that law, and, in this case, official discretion should break through contracts entered into by persons with full capacity to contract and with full understanding. Such a provision in the law cannot but be calculated to hamper free dealing and to withdraw all stimulus to industry and enterprise. The Bill gives power to the Court of Wards not only to interfere and modify future contracts but also those already made, and in force, at the time of its passing. *The post facto* legislation of this kind is much to be deprecated unless there is a strong political necessity to justify it. Mr. Lecky says:—

"In legislation relating to contracts, there is a clear ethical distinction to be drawn. It is fully within the moral right of legislators to regulate the conditions of future contracts. It is a very different thing to break existing contracts or to take the still more extreme step of altering their conditions to the benefit of one party, without the assent of the other, leaving that other party bound by their restrictions."

S. KASTURI RANGA IYENGAR.

POVERTY OF INDIA.

THESE books* have been published at a most opportune time, for at no time in the history of British India has the deplorable economic condition of the people come home so closely and so frightfully to the public mind and, we may hope, to the minds of the rulers, as it has come within recent years. During a period of successive famines of the most appalling character, causing the loss of millions of human and animal lives and the loss of property amounting to many crores. Famine and pestilence have played havoc with the lives, property and health of millions. It is not the atrocities of the South African War, but it is really the destructive career of successive famines, that has truly "staggered humanity." For the loss of life and the amount of suffering that have resulted from the war are as nothing when compared to the huge holocaust of human and animal sacrifice India has witnessed during the past years. No wars in the annals of human ambition and unrighteousness, since the very beginning of history, have a record of over 30 millions of human lives sacrificed, and yet that is the record of the consequences of Indian famines—a record that has moved the whole civilised world and compelled the overproud and resourceful British rulers to carry the bowl round the world. Is it possible that such a calamity, unprecedented in the history of the world, not even before science and civilization revolutionised the progress of the human species, can happen in this ancient and historic land whose fabled wealth and prosperity attracted foreign invaders, and attracted the British nation itself, after a century of the most enlightened rule of Britain? Surely it is playing with the destinies of the human race to

* *Poverty and Un-British Rule in India* by Dadabhai Naoroji, London: Swan Sonnenschein & Co. Madras: G. A. Natesan & Co., Esplanade. Price Rs 6.

Prosperous British India—A Revelation, by William Digby, C. I. E., London: Fisher Unwin. Madras: G. A. Natesan & Co., Esplanade. Price Rs. 7-8.

attribute such a calamity to the curse of Providence, to the vicissitudes of nature—a mother kind alike to all—while everywhere on the face of the civilised world the resources of science and statesmanship are working wonders in effecting the amelioration of the poor man's lot and a more equal distribution of the world's wealth? Such are the thoughts which the present condition of the Indian people is raising in the minds of all thinking people,—at all events in this country and in parts of Great Britain. The remedy lies not in sentimental appeals to the season, not even in a heroic combat with the monster when he actually is on the scene and opens his jaws and swallows every life within his reach, but it lies in heroic and radical measures of reform that the best ingenuity and courage of the rulers can devise.

The fact is that not only are the great bulk of the people in a chronic state of frightful poverty, but, in consequence of the system of government and of the political relations between the two countries, the impoverishment and deterioration of the dependent country is rapidly growing worse and threatens the most serious consequences in the near future. And the worst feature in the situation is the delusion of the responsible rulers who in the face of these successive dire calamities, remain unmoved and seriously contend that far from the country growing poor, it is showing a marvellous measure of prosperity which is at once the proof of the country's latent capacity for progress and the vindication of the justice and disinterestedness of British rule. It is to dispel this delusion, to convince the British public that owing to the neglect of their representatives in India, the great dependency on which the greatness and prosperity of their own mighty empire depends, is in the front of a great crisis likely to end disastrously to themselves and their portent, that the efforts of Mr. Dadabhai Naoroji and Mr. William Digby, by the side of a handful of other friends working for the same end, are directed. The poverty of India is not like the

poverty of other countries. There is poverty in every country in the world. But nowhere is poverty so deep and so widely prevalent, of such grinding nature, and so devoid of all prospects of relief or hope, as it is in India. Nowhere in the civilized world do the poorer classes embracing the great majority of the nation, live in a state of chronic starvation and suffering, fall victims to devastating famine which in one place or another and in varying stages of intensity is always more or less at work, killing and steadily undermining the vitality of the people, leaving continuously a legacy of crippled resources and enfeebled vitality. The problem of Indian poverty calls therefore for a treatment which no statesmen and rulers of other countries are called upon to consider or adopt in these modern times.

We confess that we have read these books not as unbiassed critics, but as humble workers in the same field as the authors, possessed of the same convictions, familiar with most of their facts and figures, and having had many opportunities to refute the arguments and contentions urged on behalf of official optimism which, in the face of flagrant facts recorded in official papers and of the experience and personal observation of many a competent person, seeks to transgress the laws of logic and science and persists in maintaining that *poverty* means in India *prosperity*.

It was so long ago as 1787 that Sir John Shore, then Governor General, almost for the first time made the discovery that the system of a remote alien rule is incompatible with the prosperity of the people ruled. Said he:—

Whatever allowance we may make for the increased industry of the subjects of the State owing to the enhanced demand for the produce of it (supposing the demand to be enhanced), there is reason to conclude that the benefits are more than counterbalanced by evils inseparable from the system of a remote foreign dominion.

This opinion has since been repeated by many an Anglo-Indian authority. Mr. Montgomery Martin (in 1833) calculated that the annual drain of

£3,000,000 on British India had amounted in 30 years, at 12 per cent. (the usual Indian rate), compound interest, to the enormous sum of £ 723,900,000 sterling. Colonel Marriot, Sir George Wingate, Robert Knight, Sir George Campbell, and last but not the least, the late Lord Randolph Churchill, not to speak of a host of other authorities, have expressed the same opinion. Yet, since Mr. Montgomery Martin's calculation of 72 millions and odd sterling, this drain has increased by leaps and bounds and is at present calculated to amount *annually* to the appalling figure of 40 millions sterling. Starting from where Mr. Montgomery Martin left off in 1834-35, and making a similar calculation for subsequent years, Mr. Digby arrives at the total loss to India throughout the century. He writes:—

The average annual loss, taking the trade tables alone, has been shown to be about £7 500,000. If that sum for the whole period be taken, and a charge of 5 per cent compound interest be made (though the money and produce were worth vastly more than 5 per cent. to the Indian banker, merchant, cultivator, artisan, and to all others in India, who would have been in a position to employ capital to good account, were worth at least three times five) the result is £4,187,922,732

Add £723,000,000
Total £4,910,922,732.

Thus, the adverse balance of trade against India during the last century, even at the low rate of interest I have adopted reached the enormous total of nearly 5,000,000,000. The amount is staggering by its very enormity. Yet the calculation is based on unrebutable official figures, and the burden of disproof rests on the official apologists.

Such colossal drain of wealth every year would have impoverished the richest country in the world. In fact Mr. Dadabhai Naoroji quotes Draper to show that England and other European countries were drained woefully by the exactions of the Pope in the fourteenth century, causing the impoverishment of the people and stout resistance from some countries. Yet the people of India, at the present moment, are not richer than the European nations in the fourteenth century. According to Lord Curzon himself, the average income of the Indian people per head per annum is 30 rupees or 1 anna 3 pies a day. But Lord

Curzon's figures have been controverted in the press both in India and England and are at least of doubtful accuracy. The elaborate calculations made by Mr. Digby in his book form a whole library of official publications lead him to conclusions which may well appear incredible, from their very staggering nature, to those that have not given attention to Indian economic statistics. He makes out that the average income per head of the population in the famine year of 1900 was not more than 16 s. 6 d. or Rs. 12 and 6 annas per head, in other words, less than 50 per cent. of Lord Curzon's amount! And this pittance is to day the result of a steady deterioration during a century of British rule. And on the shoulders of a people so impoverished, so abject and so enfeebled rests the stupendous fabric of British empire which costs nearly 100 crores for its administration including the 60 crores that go to make up the tribute exacted from India by the great ruling country! To verify Mr. Digby's calculation is impossible in these pages; but it may be observed that every competent man that has done anything like an investigation of the economic condition of India has arrived at conclusions more or less similarly appalling and completely disproving the optimism of the officials beginning from the Secretary of State. The burked report of the inquiry which was conducted under Lord Dufferin's direction, the official and secret calculations made by Sir David Barbour in Lord Ripon's time, Mr. Thorburn's inquiry in the Punjab, and Lord Curzon's investigation itself have led to results which, in the opinion of the present Governor-General are "neither brilliant nor gratifying." If the people of India do not go through life actually on an income of Rs. 12, is it not bad enough in all conscience that they go through life on what sustenance an average income of one anna and three pies could give them; and if, as Mr. Digby rightly observes, there be any man in India whose average income exceeds one anna and three pies a day—and there are a

number of people who receive many, many times the average,—what must be the dire necessity of the myriads of the poorer populations! Verily, the appeal of the famished millions for one meal in two days and nothing more, cannot be their condition in famine times but must be their condition in what are under official euphemism called normal years!

As the result of an economic situation so unique and so deplorable, a population is growing in India, which is steadily and to an increasing extent under-fed from year to year and which accordingly deteriorates continuously in vitality, can do less and less work to obtain its livelihood, is exposed to diseases of several kinds and develops increasing discontent. Sir Charles Elliot said:—

I do not hesitate to say that half our agricultural population never know from year's end to year's end what it is to have their hunger fully satisfied.

Certain other remarks he made in the same connection being apposite, we quote them below:—

The ordinary phrase in these parts, when a man asks for employment, is that he wants half a seer of flour; and a phrase so general must have some foundation. I believe that it has this much truth in it, that 1 lb. of flour is sufficient, though meagre, sustenance for a labouring man. That a labouring adult can eat 2 lbs. I do not doubt, but he rarely, if ever, gets it. But take the ordinary population in a family of five, consisting of a father, mother, and three children. The father will, I would say eat a little less than 2 lbs. the mother a little more than 1 lb., the children about 3 lbs. between them. Altogether 7 lbs. to five people is the average which, after much inquiry, I am inclined to adhere to.

Half the agricultural population would mean one hundred millions of people and with hundred millions of people underfed and starving from year to year and from generation to generation, and called upon to bear a foreign drain amounting to 60 crores which means the sacrifice of one month's income by every individual in the empire and a growing taxation far heavier, in proportion to the means, than any other civilized nation is at present in any part of the world called upon to bear, can any crisis in the life and history of a nation be more serious than that which is beheld in this country under the rule of the British nation—a nation foremost

in the world in all natural and moral resources?

Far too little attention is paid to this important aspect of the question. It is not ordinarily realised what reduced and steadily deteriorating vitality of the labouring class means to the prosperity of the nation. A sick and enfeebled nation can never be healthy or prosperous. The social situation of the Indian people encourages propagation to the utmost; but the normal increase of population is below that of other countries where such sanctions do not prevail to the same extent, and, as the recent census shows, under certain conditions, the growth of the population is seriously retarded. The last fact is no doubt to be traced to the abnormal rates of mortality due to famine and scarcity. But as we have pointed out above, the normal conditions under which millions of people live in this country are hardly removed from those of scarcity and famine. If millions of people live on about 1½ lbs. of food a day instead of about 3 times that amount in normal years, it would be a cruel mockery to deny that their normal conditions are chronic famine and scarcity. What the result should be as the outcome of these two factors, the absence of all social restrictions on marriage on the one side and the insufficient and very low nourishment on the other, may be imagined. It is no less than a social basis rotten and weak with constant and growing danger to the healthy existence of society. Now it is often argued, the low income on which the agricultural population subsist is quite enough to enable them to live according to the standard in force amongst them. We consider this argument to be the most unsympathetic as well as the most short-sighted.

The first duty of government is to enable people to live well and live happily. Is this duty fulfilled in the present condition of the Indian labouring classes? These constitute more than half of the population of India, and who will deny that the life they lead in normal times is the very picture of the lowest degradation of human nature? The Indian labouring classes do not indeed eat uncooked

food, do not live by hunting, but lead a sort of orderly social life. But having reached the primitive social state, can any community live more miserably than the Indian labouring classes? The rulers of India, in referring to the normal state of the poorer classes, point to the low standard that is in force amongst them, and are satisfied that nothing has happened to lower this standard. They forget that no lower standard of human life is possible, and that this standard can be raised, and under a civilised government, ought to be raised. They *somehow* live, whether they live like human beings with such health and strength as are necessary for happiness and for the well-being of their progeny, is not considered a business of the State. The conditions on which depend health and strength, physical, mental and moral, are, it is forgotten, the very basis of industrial efficiency, on which the production of material wealth depends. It is also true conversely that the chief importance of wealth consists in the fact that, when wisely used, it increases the health and strength, physical, mental and moral of the human race. Physical vigour is the first condition of efficiency in every occupation of the poorer classes, that is, muscular strength, a good constitution and energetic habits. Nor can force of will and strength of character be dispensed with. But this last depends on the man's physical condition of nervous strength. In all ages of the world, except the present, says Professor Marshall, "want of food has caused wholesale destruction of the people. Even in London in the 17th and 18th centuries the mortality was 8 per cent. greater in years of dear corn than in years of cheap corn.... In England now, want of food is scarcely ever the direct cause of death but it is a frequent cause of that general weakening of the system which renders it unable to resist; and it is a cause of industrial inefficiency." And apart from the nutrition and sufficiency of food, the effect produced upon the labourer of dirty and scanty clothing, of excessive work, of the absence of the conditions of vigour closely allied

together, namely, "hopefulness, freedom and change," demand serious consideration. Regarding this last, Professor Marshall says:—"All history is full of the record of inefficiency caused in varying degrees by slavery, want of freedom and other forms of political and social oppression and repression. Freedom and scope increase not only man's willingness, but also his power for work; physiologists tell us that a given exertion consumes less of the store of nervous energy if done under the stimulus of pleasure than of pain, and without hope there is no enterprise.... Change of work, of scene and of personal associations bring new thoughts, call attention to the imperfections of old methods, stimulate a demure discontent, and in every way develop creative energy." Still these conditions of vigour as well as the vigour itself depend on the quality and on the quantity of food available to the working man. In India as well as in other countries education is a blessing to the labouring as well as to the other classes. And an intelligent and trained artisan or mechanic is as much an acquisition to society as a man of higher and more costly culture. For all these gifts the Indian poor have as much claim at the hands of the rulers as the poor of any other country. But under their present condition of chronic poverty and destitution they must live a life of brutes, and it is with that standard of life we are every day accustomed to hear Government declaring that the ryots should remain for ever satisfied. The British rulers of India have alone the unique distinction of exercising an enlightened and benevolent sway over nearly 200 millions of people living a life of chronic starvation and of the most abject ignorance, grim and silent in their suffering, without rest in life, without comfort or enjoyment, without hope or ambition, and living because they were born into the world and dying because life can no longer be kept in the body.

Mr. Digby abstains from discussing in his volume the question of remedies, although the remedies he and his school of Indian politicians

have in view and have urged for many years, are well-known. These remedies have been in season and out of season and with singular persistence, pressed on Government and the public by Mr. Dadabhai Naoroji during a long life of unflagging zeal and activity. To these remedies, we are glad to acknowledge, the eyes of the responsible rulers are being gradually opened. But in one of these, far more than in others, government place special faith and are doing their very best to stimulate its operation, we mean the investment of British capital in this country by means of "India Development Companies" and kindred enterprises. In these pages and elsewhere I most emphatically re-iterated against this view. When the agricultural life of a country ceases to expand, a prudent government should cast about for means by which its non-agricultural wealth might be enhanced. Said Lord Curzon last year in the Supreme Legislative council:

It is for this reason that I welcome, as I have said to day, the investment of capital and the employment of labour upon railways, canals, in factories, workshops, mills, coal mines, metalliferous mines, and on tea, sugar and indigo plantations. All these are fresh outlets for industry. They diminish *pro tanto* the strain on the agricultural population."

A most dangerous delusion! Under the influence of unrestricted foreign exportation supported by political as well as economic causes, the people of the country are ceasing to be owners of their old industries, and are being reduced to the condition of labourers and slaves under alien employers. If the industrial forecast recently made by Mr. Jesse Collings is to be the future of India, that is, British capital and British management with cheap Indian labour, if in the future industrial wealth of the country the children of the soil are to enjoy no more share than may fall to them as "cheap" labourers, the plan now pursued, of causing every imaginable source of wealth to be placed in the possession of British capitalists is the best plan. Indians will then be a "NATION OF SLAVES."

G. SUBRAMANIA IYER.

THE RAMZAN ROZA.

THE Muhammadans as a nation are known throughout the world for their strict observance of the *Namaz* or the worship of God five times every day, and of their fasts. The greatest fasting season for them in the year is the month of *Ramzan*, the ninth month of their calendar, and covers a tedious period of thirty days. All rigid Muhammadans observe it with a patience which is really wonderful and as the whole of their ninth month is with them a period of fasting, this annual religious observance is known as the *Ramzan-Roza* or fast. Of all the twelve months of their year the ninth month—*Ramzan*—is devoted to fasting, because it was the month in which the writing of the *Quran* was completed by their prophet Muhammad. It was on the eighth day of the month of *Rajjab*, the eighth month, that Muhammad was taken by the angel Gabriel to the seventh Paradise. Muhammad is said to have had an interview there with God and to have been ordered to preach to the world that every Mussulman should observe five times *Namaz* (worship) daily and six months' fasts every year. With this message to the world, the Prophet left God and when he was coming down, he was met by Musa (Moses) in the fourth Paradise. Now Moses asked Muhammad as to the nature of the commandment of God he was taking to the world, to which the Prophet is said to have replied:—

"I am ordered to preach five times *Namaz* daily and six months' fast annually to the world."

Moses, with a smile on his lips, said

"My friend, this is too much and to a certain extent impossible. Every alternate day in the year will be a fasting day, if six months' fasts have to be gone through. Return therefore to the seventh Paradise again and request God to lessen the number of fasting days."

Muhammad agreed and went to God with this request. God was pleased and altered the six months' fast into one of three months. In the fourth Paradise, Moses met again Muhammad returning a second time to the world and heard of the concession granted in the fasting days by God.

Musa, not satisfied with the concession thus obtained, argued that the three months' fast in a year was also as impossible as the six months' fast originally ordained and again requested Muhammad to go to the seventh Paradise a third time and request God for further concessions. Again Muhammad went to God a third time and the great God was good enough to reduce the fasting days to one month and fix *Ramzan* as the month for fasts. Because it was so ordained by Muhammad as the commandment of God, the *Ramzan* fast is so strictly observed by every Muhammadan male, female, and child, children below twelve years of age being exempted from the fast. Females in pollution give it up on those days and make up the number of days thus lost in the succeeding month of *Shavval*. Even so men, who fall ill and forego fast in the *Ramzan* month must make up the number of days in the succeeding month of *Shavval*. In these fasting days every religious Muhammadan is allowed to take his food once between 3 and 4 A.M. He may take anything he likes and there is no prohibition of any kind. Fish, flesh and vegetables and whatever he may take according to his position on ordinary or festive days, he can eat at that hour only. And to announce this hour in every Muhammadan town, the *Nagara* (drum) is sounded an hour or two previous to the prescribed time. The rich generally get up at 1 or 2 A.M., and have their food newly prepared and dine between 3 and 4 A.M. whereas the poor cook and keep ready their food in the early hours of the night and dine in the same hour in the morning. As the *Quran* is said to have been completed in the *Ramzan* month, this is a second reason for the Muhammadans observing this month as a most holy month for fasts and prayers: With the exception of one good meal between 3 and 4 A.M., everyday, no religious Muhammadan can swallow even his own saliva during the period. He must avoid all evil acts and intentions; he must not injure or harm any one, much less can he beat any one; he must neither snuff nor smoke; he must

check vomiting; he must not sleep in the same room with his wife; he must even abstain from touching her with any amorous desires—the least deviation from any of these rules, so rigidly laid down, being supposed to take away all the accumulated good results of the *Ramzan* observance.

And yet a greater and stronger reason for the *Ramzan* being a most sacred month for the Muhammadans is that the night of *Shah-e-Khadar*, the night of dignity, and the only night in which a Mussulman can attain paradise is supposed to fall in this month. It is not known which night in the month is the sacred *Shah-e-Khadar* night. Again the duration of the *Shah-e-Khadar* is not supposed to be the long 12 hours of the night, but only a very short period—a few minutes. It is the belief of every Muhammadan that God in the *Shah-e-Khadar* night is in such a pleasing mood that he does not refuse the prayers of any one even though he may be the worst sinner. As there is no rule fixed by which the *Shah-e-Khadar* night can be ascertained and as the occasion of availing one's self of this happy mood of God can never be given up, the whole of the *Ramzan* month is devoted to fasts and prayers. The conclave of *Maulvis* (the learned men) have conventionally fixed that this night occurs on the 27th night of *Ramzan*. Nowadays this night, the 27th, is observed as a grand night; the whole house is lighted up with lamps, prayers are offered and alms-giving given on a large scale. On the 27th night between 3 and 4 A.M. the extremely religious Muhammadans do not break their fast as in the other nights by taking any food but drink milk only. The *Ramzan* fast begins after seeing the first moon after the new Moon in the month of *Ramzan* and ends on seeing the first moon after the New moon in the month of *Shavval*. The closing day of the hard fastings of the *Ramzan* is a grand day. Every member of an Islam household including the new-born baby undergoes complete bathing in the morning. On this day there is a good deal of alms giving

in every Muslim household. This is called technically as the *Ramzan Fitra*. The lowest scale is a seer and a quarter of wheat for every one. If a family consists, say of two males, two females and two children, one of the last being a baby in the breast, six times $1\frac{1}{4}$ seers of wheat must be given away in alms and on each occasion the name of the particular person on whose account it is given must be repeated. The wife to acquire all the meritoriousness of this kind of alms-giving to herself must purchase the wheat out of her own dowry and must not utilize her husband's money. It is believed that the good results of the Ramzan fast never accrue until the alms-giving at the rate of a seer and a quarter for each soul is gone through. It is also believed that till the alms are doled out the several prayers chanted during the *Ramzan* never mount up to heaven but stick only to the mortal world! After almsgiving *Namaz* is performed on a grand scale. The sacred verses of the Quran are chanted and every devout Mahammadan is expected to go through the whole of it.

In addition to the almsgiving, every capitalist owning a capital of Rupees fifty and upwards is enjoined by the Quran to distribute $2\frac{1}{2}$ p. c. of his capital as alms to the poor. This is called *Zakkat* and the time generally chosen for this gift is the twenty-seventh day of the Ramzan as the twenty-seventh night is considered the holiest of holy nights. Big sowcars have thus to give away a large amount in hundreds and thousands, and some instead of giving in the shape of money buy clothes for the amount and distribute them among the poor.

After alms-giving and *Khudba-Namaz* the *Ramzan* fast is supposed to be over and the fast is closed with a grand feast. Very early in the morning after the sight of the first moon in the month *Shavval* the fast is broken. The first dish that is consumed is boiled milk thickened with a little sugar and plums.

S. M. NATESA SASTRI.

The World of Books.

HISTORY OF INTELLECTUAL DEVELOPMENT ON THE LINES OF MODERN EVOLUTION. By John Beattie Crozier. Vol. III. (Longmans, Green & Co.)

In this volume Mr. Crozier determines to what extent, if any, a knowledge of the evolution of civilization in the past in its political and social aspects can be of service to the practical statesman of to-day. The first half of the volume exhibits "some of the now generally admitted errors in the practical statesmanship of the nineteenth century, from which the nations might have been saved, had their statesmen a knowledge of the evolution of civilization to guide them," and the second half "the practical value of the principles which had been disengaged in the course of the discussion by applying them in the outlining of a reconstructive policy for the twentieth century for England, France and America respectively, where their correlation and interplay, as well as their adaptability and inflexibility can be abundantly tested and seen." The principles that Mr. Crozier evolves from the discussion in the first half of the volume for the practical guidance of statesmen are: (1) that the type of a nation is to be preserved, as the civilization of the world as a whole gets what it has of completeness or harmony not from the fulness or completeness of any one nation but from the complementary contribution of them all; (2) that all merely abstract ideals like those which presided over the birth of the French Revolution are to be expunged from practical politics and that reforms are to be constructed, not *de novo*, but out of the existing type, modes of life, traditions and institutions in which the people in question have been brought up, in which they believe, and under which they have been accustomed to think and to act; (3) that there should be no gaps or exclusions anywhere, no castes, privileges or barriers, all careers alike being open to talent and virtue; (4) that all progressive reform movements are to be directed towards the material and social conditions rather than towards the character of the people. Mr. Crozier analyses the elements of civilization and shows that the above stated principles embody its main trend and tendency and discusses the changes which the history of the evolution of civilization demands to-day in the statesmanship of England, France and America, in order that the practical politics of these nations may be kept in harmony with that evolution. The discussion is throughout practical and extremely interesting.

THE TALE OF THE GREAT MUTINY.

By W. H. Fitchett B. A., L. L. D. *Bell's Indian and Colonial Library.*

It seems to us a great pity that books on the Indian mutiny should constantly be increasing. It is impossible to discern any good purpose in raking up tales of atrocities and cold-blooded murders. The reading of accounts relating to such gruesome deeds is certainly not calculated to improve good feeling between Europeans and Indians. There are a hundred "Memoirs" and "Journals" and "Histories" of the great revolt but, says Dr. Fitchett, the mutiny still waits for its Thucydides. For our part we wish many of these hundred books never saw the light of day and the world will certainly not be a bit worse if no Thucydides spends his genius in a description of the Indian Mutiny. Fortunately for the British character, at a time when everywhere "revenge" was the cry, "clemency" reigned and we have had the reign of law and justice. It is nothing but affording a temptation to the base and brutal instincts of humanity to paint and present before them heart-rending descriptions of murders of innocent women and children and it may be safely asserted that more books on the Indian mutiny will contribute more and more to stir up ill-feeling in the minds of some Europeans who have not much "balance" in them. It is for reasons like this that we are averse to publications on the mutiny. At the same time we owe it to Dr. Fitchett to say that his *Tale of the Great Mutiny* is an admirable production from point of view of literary vigour and excellence of description. In relating the origin of the unfortunate sepoy revolt, Dr. Fitchett has been at pains to explain the real causes. He justly condemns Mr. Justin McCarthy for contemplating on the mutiny "through the lens of his own politics" and for regarding it as a struggle for Home Rule, and ascribing to it the dignity of "a national and religious war," a rising of the many races of India against the too oppressive Saxon. Dr. Fitchett points out carefully how the plain facts are opposed to McCarthy's absurd theory. "The struggle was confined to one Presidency out of three. Only two dynastic princes, Nana Sahib and the Ranees of Jhansi joined in the outbreak. The people in the country districts were passive; the British revenue except over the actual field of strife, was regularly paid. If their own trained native soldiery turned against the British, other natives thronged in thousands to their flag. A hundred examples might be given

where native loyalty and valour saved the situation for the English." Dr. Fitchett rightly asks, if the mutiny had been indeed a national uprising, what chances of survival would the handful of British have had? and it is well to bear in mind that at the time of the mutiny there were only 38,000 British soldiers in a population of 180,000,000.

It is quite true, as observed by the author, that the mutiny in its later stages drew to itself political forces and took a political aspect. But as has been pointed out by Herbert Edwardes, the Hindu sepoy "having mutinied about a cartridge, had nothing to propose for an Empire, and fell in, of necessity, with the only policy which was feasible at the moment, a Mohamadan king of Delhi."

"But the emergence of the Moghul dynasty in the struggle was an after-thought, not to say, an accident. The aged King at Delhi, disowned and almost forgotten, was caught up by the mutineers as a weapon or flag." Dr. Fitchett also points out that the greased cartridges were something more than the occasion of mutiny. "They were its supreme producing cause." A fanatical belief on the part of the sepoys that these particular cartridges concealed in their greasy folds a dark design against their religion, was undoubtedly the immediate occasion of the great mutiny. Yet, it would be absurd to regard this as its single producing cause. In order to assert this, we must forget all the other evil forces at work to produce the cataclysm. The annexation of Oude; the denial of the sacred right of "adoption" to the native princes, the "over-anglicised" policy of Lord Dalhousie, the conditions of the Indian army which denied a career to any native soldier of genius, the decay of discipline in the Sepoy ranks and the loss of reverence for their officers by the men, &c., these contributed as much to it as anything else.

So much for the causes of the mutiny. We have no space to refer to some of Dr. Fitchett's stirring descriptions of the story "with its swift changes, its tragical sufferings, its alternation of disaster and triumph." His tale is a simple chain of picturesque incidents and for the sake of dramatic completeness, the sketches have been grouped round the three heroic names of the mutiny, Cawnpore, Lucknow, and Delhi. Only the chief episodes in the drama have been dealt with in a brief space, and have been told in simple fashion as tales, which illustrate the soldierly daring of the men and the heroic fortitude of the women, of the British race.

ELEMENTS OF STATISTICS. *By Arthur L.*

Bowley M. A. F. S. S., Lecturer in Statistics at the London School of Economics and Political Science, (P. S. King and Son, London.) Prices 10-6.

It is a common remark that anything can be proved by statistics. There is perhaps much truth in this. The fact however is that the statistician who does not recognise the limitations to his science must be prepared to be disbelieved, for the ignorant man who looks to his surroundings alone will not find statistics quite acceptable to him. For sociological purposes, statistics may be defined as "the science of the measurement of the social organism regarded as a whole in all its manifestations." It takes no account of particular individuals or facts. Its object is to determine the typical examples suitable for purposes of the investigation on hand, leaving out the deviations from the type. The aim is to find out the average which will serve as an index of the attributes possessed by a number of individuals or facts. Hence large numbers are necessary for the conduct of statistical enquiries. Statistics as the author rightly terms it is the science of averages. "The object of a statistical estimate of a complex group is to present an outline, to enable the mind to comprehend with a single effort the significance of the whole. To do this it is necessary to include rigorously any presentation of details, for the same reason that, in a painter's rendering of a tree, the individual leaves are not distinguished. The outline will be a little blurred, a little inaccurate; but it will be as distinct and detailed as the mind has power to grasp it, or the eye to see it; the impression will be rightly given." "There is," says Mr. Bowley "an important principle involved in this method. The individual members of a group vary continually, the whole group varies very slowly. It is impossible to follow or measure the motion of separate atoms; it is comparatively easy to state the laws of motion for a solid body. Great numbers and the averages resulting from them, such as we always obtain in measuring social phenomena, have great inertia. The total population, the total income, the birth and death rates, average wages, change very little; similarly quantities relating to a simple family change very fast. It is this constancy of great numbers that makes statistical measurement possible. It is to great numbers that statistical measurement chiefly applies." Much need not be said about the great value of statistics. To political economists, sociologists, physicists, and to politicians its value is inestimable. Professor Marshall rightly points out

"statistics are the straw out of which, I, like every other economist, have to make the bricks." Nor is the study of statistics of less value to the politician. Thus, for instance, the rate of wages, and the average income of an individual in a country; these could only be known by statistics. Mr. Bowley's book will equip the reader with the necessary qualifications for the study of statistics. At the present moment in India, when there is a great deal of angry discussion between officials and non-officials regarding the poverty of the people, when there is a difference of opinion as to whether the average income of the individual has increased or decreased under British rule, when several other kindred but intricate questions are discussed, a proper study of the statistics of the question will be of immense use. Mr. Bowley's book comes with the inherent recommendation that it is from the pen of a person who has been a lecturer on the subject in the London School of Economics and Political Science since its foundation in 1895 and is based upon the author's lectures. The book is designed to supply a "compact statement of principles acknowledged by statisticians, of the methods common to most branches of statistical work, of the artifices developed for handling and simplifying the raw material and of the mathematical theorems by the use of which the results of investigations may be interpreted." It may serve as a text-book on the subject. Our Universities may think of introducing it along with political economy for the Bachelor of Arts Degree examination.

A MANUAL OF LEGAL MAXIMS. *By*

Desai Narotam, Pleader, High Court, Bombay.

Price Rs. 5.

This is a book which will be useful to the practitioner, the student and also to the lay reader who not infrequently comes across legal maxims in Latin in the course of his general reading. Within the compass of 323 pages, closely printed in double column, the compiler has collected together in alphabetical order more than 6,000 Maxims, words, phrases etc chiefly from Latin, with notes specially referring to the Indian Law. Words and phrases are explained in English with notes showing the manner in which they are used. Maxims have been treated by reference to various English works on the subject, citing English as well as Indian cases bearing on each maxim. A table of cases cited, of acts and sections referred to, an exhaustive index arranging the maxims under different headings according to the subject and a general index, these will considerably facilitate the constant use of this publication.

THE YOUNGEST GIRL IN THE SCHOOL.

By Evelyn Sharp with illustration by Charles E. Brock—Macmillan's Colonial Library.

An excellent novel giving a clear picture of the training of "an extraordinary imp of a child," Barbara or Babs, in a girl-school maintained by a certain Head-Mistress, Miss Finlayson at Woolten Beeches. The father of this girl was one Mr. Berkley, a famous lecturer and a devout scholar and the young girl Babs, his child, was left with her brothers to take care of herself, with an old aunt Auntie Anna. Babs had never been put in any school before she was 11 years of age. She was ignorant of all the things that other children knew, but had picked up extraordinary bits of knowledge in her own way in her father's library. When she was undergoing the examination for admission in the Woolten Beeches, she said she knew no history, but admitted that she had learnt all about Napier's History of the Peninsular War, The Four Georges, &c., &c. She had no knowledge of the elements of Geography but had learnt all about them from Jules Verne's Story books. She knew nothing about arithmetic but had read that "nice interesting book with pictures and triangles." Such was Babs when she entered the Woolten Beeches institution. Miss Finlayson—the Head Mistress—receives this girl, grasps her superior intelligence, discovers her inexperience, gives her the full scope to mend her shyness. Babs though dissatisfied at first and disliked by every other girl turns out the best of the lot and begins to be liked by everyone. When she entered the institution first she imagines that everything goes against her, writes letters to her brothers and other relations to come and take her away. Miss Finlayson takes the party of these youngsters by surprise, gives them a good supper and makes them retire of their own accord leaving their sister, Babs behind. This however, was the turning point in Babs' career. From this moment she becomes the favourite of every one. Throughout the novel, Miss Finlayson is the type of what a Head Mistress ought to be; she studies the nature and disposition of every girl committed to her kind care, gives them every privilege to train themselves up as good girls and maintains a strict discipline, at the same time exercising a mother's care over them all. The girl's visit to an infected cottage to supply food to some sick people there soon after their listening to a lecture on the "pursuit of good works" is quite typical of a child's adventures. The Gymnastic display, the accident to Babs, the meeting of the girl and her father are most beautifully delineated and the plot is simple and quite true to experience.

MYSTERY OF THE CLASPED HANDS

by Guy Boothby (Geo. Bell and Sons, London.)

A cleverly written and interesting story. The plot is simple but skillfully worked up. Godfrey Henderson, a struggling artist of some renown, succeeds to a large estate on the death of his uncle. He falls in love with the shrewd and sweet Miss Deverena who returns his affections, and their engagement is announced. But their love is to be tried in the crucible of trouble before it is to be allowed to run smooth. While engaged in examining the contents of many packages of wedding presents they lighted upon a curious looking foreign box which, on opening, revealed, with the fingers lightly interlaced, two tiny hands which had been severed from the body at the wrist. Godfrey instantly recognises the hands to be those of a beautiful Italian lady, Teresina Cardi, who served him as a model for his masterpiece when he was still a struggling artist. The rest of the novel is devoted to a solution of the mystery. Through irony of fate, Godfrey is charged with the murder of Cardi—in the trial of which Victor Fenzdon, a friend of Godfrey, gave the most damaging evidence against the latter to whom he was in many ways indebted. But detective Burrell comes to the rescue, and working through a clue afforded by a fragment of cigarette which he picked up in the deceased woman's chamber, unravels the tangled skein of "the mystery of the clasped hands" and traces out the real culprit who is no other than Fenzdon. This ungrateful and malignant friend was secretly married to the fair Italian, but soon got disgusted with her owing to his straitened circumstances, and anxious to marry a rich widow Mrs. Montgomery with whom he was in intimate terms, sacrificed his wife. Before he could be brought to trial, the wretch is suddenly summoned before the Higher Tribunal for divine retribution. As may be expected, the innocent sufferer is acquitted and restored to love and happiness.

ALGEBRA FOR HIGH SCHOOLS.

We have received from Messrs. Thomson & Co., Madras, a copy of their "Algebra for High Schools" by K. G. Venkatasubbiah B.A. L.T. Tutor of Mathematics, Madras Christian College. The book is intended for the use of pupils preparing for the entrance examinations of the Indian universities. The author has, throughout the book, endeavoured to explain the principles of the subject in a clear way, and copious examples are given to illustrate every principle. The examples are well-arranged, and experienced teachers bear high testimony as to the value of the book. We recommend the book to those for whom it is intended.

Topics from Periodicals.

ANARCHY.

The leading article in the January number of the *Arena* is a thoughtful paper by Dr. Newton devoted to the problem of anarchy with which the American people have recently been confronted. Dr. Newton's remarks on the ethical, sociological and political phases of the subject should enlist the attention not alone of national legislators but also that of enlightened statesmen throughout the world. Dr. Newton first of all notices the confusion that prevails in some eminent quarters in regard to socialism and anarchy. He concedes that the two profess the same aim—the regeneration of human society, that they are alike striving for industrial co-operation, to bring to an end all forms of despotism in government. But both are moving by diametrically opposite methods: Dr. Newton points out the distinctions thus:—

But, one seeks this by the way of evolution—the other, in its best known form, by the way of revolution. One is a natural development of our present system—the other would break with the existing order and make a fresh start in civilization. The one would multiply the functions of government—the other would minimize the functions of government. One believes in law—the other believes in no law. The one looks to the State, the city, and the nation for collective ownership of the sources of natural wealth and the means of production and exchange—the other looks to freely formed groups of working people becoming the owners of all natural monopolies and of all means of production and exchange. The ideal society of socialism is a vast organism in which “all are but parts of one stupendous whole,” vitally interactive, co-ordinated into a noble State. Its type is the human body. The ideal of anarchy is a mass of individual cells nucleating together in temporary forms, free to break up at any moment and recombine in other forms. Its type is the jelly-fish, or the sponge.

Then we need to distinguish in anarchy itself. On the one hand there is philosophic anarchy which is as old as Plato, but dates back, in modern time, to the Frenchman, Proudhon, the earliest modern philosophic anarchist, on the other, hand there is revolutionary anarchy, a degenerate form of philosophic anarchy. Philosophic anarchy is in reality the ideal of social and political science. It makes no appeal to force. It relies upon the education of mankind. Proudhon concluded that anarchy is the only real form of government. Under anarchy people would manage their public affairs together without the need of legislators. In the business world society would resolve itself into industrial groups, each of which would manage its affairs co-operatively. Anarchy, viewed philosophically, was considered the ideal of human society by such men as Prince Kropotkin, Elise Rudes and Thomas Jefferson who enunciated

an ideal of political society which is nothing less than anarchy. He indicated the goal of all government as a social order in which no government should be needed and no laws would be written on the statute-book, because every citizen would be a self-governing unit and the moral law would be enshrined in his heart.

This is also the ideal towards which that remarkable Russian, Count Tolstoi, works. To proceed to revolutionary anarchy. This appeals to violence. It would establish a social political terrorism as a means of scaring society and the State into a concession of its demands, paralyse all law that there may be a reign of lawlessness out of which a new law, the law of the individual may arise. Philosophic anarchy is idealistic and looks on to the future without appeal to force. Revolutionary anarchy is the result of illogical application of idealistic philosophy to social realities. How, then, to safeguard ourselves against the importation of revolutionary anarchy? In the writer's view the periodic craze for murder breaks forth from paupers, criminals and the insane who form the parents of a considerable part of the nation. The first remedy therefore should be to restrict undesirable immigration as far as possible. To minimise the production of criminals,

We must systematically educate our foreign-born citizens and our public-school children into a recognition of the splendid political privileges given in our Republic, and teach them to see that in their hands are the means of correcting all social evils peacefully.

We must all cherish a deeper reverence of every form of law. We must learn to hold all life, even in its humblest and most insignificant forms sacred. To end the fascinations of revolutionary anarchy for certain minds, we must not merely use counter force to suppress it; we must seek to accept and embody whatever truths there are in the philosophic anarchy which gives it birth. We must individually seek to realize the ideal of philosophic anarchy, and become ourselves, each of us, self-governing beings, enshrining the moral law, so as to need no restraint of external legislation. While doing this, we must hold the untrained lives around us under the stern majesty of law, until they, too, become self-legislating human beings, living embodiments of immanent law.

THE ACTS OF THE GOVERNOR-GENERAL OF INDIA IN COUNCIL *by Desai Narotam, Pleader, High Court, Bombay. Price Rs. 2.*

This book contains all the Acts of the Governor-General of India in Council passed during the last year. To make the collection useful the author has printed for each of the Acts the statement of objects and reasons, report of the Select Committee, speeches and a number of useful extracts from the proceedings of the Legislative Council.

MARQUIS ITO.

Mr. Alfred Stead supplies the *Review of Reviews* with an excellent character sketch of Marquis Ito which opens with a beautiful portrait of that great statesman of Japan. Ever since the first Cabinet was formed Marquis Ito has been the virtual Prime Minister of Japan. The people of Japan from the highest to the lowest have confidence in their leader. Mr. Stead adds:—

Great and gifted as are the other great Japanese statesmen, Count Inouye; Count Okuma, Marquis Yamagata, Count Matsukata—that glorious group of intellects reared in an Oriental civilization, which has led Japan to its present great position—none of these would grudge Marquis Ito his world-wide fame.

THE GREATNESS OF THE MAN AND HIS OFFICE.

Marquis Ito is the friend and confidential adviser of the Emperor who has conferred upon the Marquis every sign of his confidence and his favor, on one occasion decorating him with an honor until then reserved for royal personages. The Statesman's work stands unique in the world's history, as Japan's growth is alone in a class by itself. Mr. Stead proceeds:—

Japan has arisen from nothing, according to Occidental ideas and in thirty odd years has become the holder of the balance of power in the Far East. The Marquis Ito has been the principal figure and worker in this marvellous, this unprecedented national change. To no other man in this world has it been given to look back from the comparatively early age of sixty years, and see such a life's work lying behind him.

All his life, Marquis Ito, has been in government service, and has held many offices such as Under Vice-Minister of Finance, President of the Imperial Household of the Privy Council, of the House of Peers. Notwithstanding these, he has also been frequently sent to foreign lands on special missions:

PATRIOTISM.

Perhaps the greatest of his work to make possible the Japan of to-day was in his forcing the people to realise that it was necessary to meet the foreigners, who had then overwhelmed the country, on their own ground. Mr. Stead observes:—

Having made this great change, in 1883 he drew up a constitution for Japan, and changed an absolute monarchy into a constitutional one as easily as another man might change a mis-spelt word. Of this great work Marquis Ito told me only this year that the work was very difficult and productive of much thought.

AS A PARTY LEADER.

In 1890 Ito formed a party known as the Constitutional Political Association. Ito's views on the duty of a party are full of importance:—

"If a political party," says the Marquis Ito, "aims as it should aim, at being a guide to the people, it must first commence with maintaining strict discipline and order in its own ranks, and above all, with shaping its own conduct with an absolute and sincere devotion to the public interests of the country; and it must moreover, at all risks," avoid falling into the fatal mistake, of giving official posts to men of doubtful qualifications simply because they belong to a particular political party.

Mr. Ito is now making his fifth tour to Europe. Mr. Stead thinks that there are many things which Europe may learn from Japan and not the least is that shown excellently in the present tour of Marquis Ito. The reasons for the visit are not made known yet. However, Mr. Stead gives this extract from Ito's reply to a Chicago interviewer:—

I am travelling chiefly for my health, and incidentally to collect facts concerning American and European trade for the Japanese Government. . . . I am however, very anxious to meet men in the control of affairs in the United States and England. . . . I have the commercial interests of my country very much at heart. We would like to change our tariff regulations and impose higher duties on many things we import, but we are debarred by treaties with foreign Powers. This does not seem fair. Japan is in a most prosperous condition, and is on excellent terms with the rest of the world, particularly England and America.

It would further appear that the visit is an important and perhaps an epoch-making one. For Mr. Stead adds:—

Whatever may be the reasons made public for the present visit, there is no doubt that Marquis Ito is availing himself of this opportunity to find out for himself the international condition of affairs in Europe. Although he has no political mission, nor diplomatic powers, it is an open secret that he returns to Japan to undertake the task of forming a new Cabinet in the newly elected Parliament which will meet in December, 1902. Thus he will soon enough have the fullest of powers to conduct negotiations, and it is then that will be seen the fruits of the present journey.

Passing on to consider the probable motives of Marquis Ito and the results of his European visit Mr. Stead forecasts the other wishes which the Marquis bears in his mind and which he will seek to fulfil on his return to Japan:—

Japan seeks an alliance, offensive, and defensive, if possible, or failing this, defensive only. Between a Russo-Japanese alliance there lies ever a small island situated before Masanpo Harbour. This island is the centre of the Far East, is a potential Gibraltar, ownerless at present, but envied far more than all the rest of Korea. This island, the occupation of Port Arthur, and the national sentiment, present to the majority of Japanese statesmen insuperable obstacles in the way of Russo-Japanese agreement. France goes with Russia, and it is to England and Germany that Japan, in the person of Marquis Ito, turns her eyes—England because of her great fleet and lines of coaling stations, and Germany because she has always at command three votes in the European Councils.

THE INDIAN VILLAGE COMMUNITY.

Prof. S. Sathianathen of the Presidency College, Madras, contributes an interesting article to the *East and West* on the Indian Village Community. The Professor states the theories of Sir Henry Maine and Mr. B. H. Baden—Powell and supports the latter in his contention that since Sir H. Maine wrote his work evidence far more important and extensive has been made available to the student of early—world history. Maine's theory is:—

there was a single primeval type of Indian village community to which all Indian village communities conformed in spite of minor differences. The essential features of this institution were: (a) the village community formed a single unit so far as proprietorship of land was concerned, in other words that the village land as well as the waste land attached to it was held in common or collectively; (b) the village constituted a self-governing community and its affairs were not conducted by a headman, but by a council of elders or heads of the co-sharing villagers; (c) the members of this corporate body had no definite share in the land; (d) these members originally consisted of kinsmen of a common lineage, or those who had been assumed to be so by some form of legal fiction—this circumstance Sir H. S. Maine brings forward as substantiating his theory of *Patria Potestas*; (e) that these village communities were not simple bodies with equal rights, but they were composite groups containing social layers amalgamated at different times, the whole forming a sort of hierarchy of different castes.

Mr. Baden—Powell adduces several reasons to prove that Maine's simple village community was neither universal nor *Primeval*. For there was extant before the Aryan settlement immigrant tribes as in Assam, and even the Dravidian settlers much preceded the Aryans. Mr. Baden—Powell distinguishes two types of village communities, the non-Aryan or the *Severalty* or *Ryotwari* Village and the Aryan or the *Joint Village*.

The chief features of the *Severalty* or *Ryotwari* village are the following: there is no joint ownership of the village site or of any adjacent waste land, but the whole area is divided into a number of separate and independent holdings; the village is self-governing, but the authority rests not with a panchayet or a committee of elders, but with the hereditary headman. These *Severalty* villages are to be found all over Southern and Western India, over Central India and even over the whole of Bengal excluding Bihar. The *Joint Village* is the form which is prevalent in the North-West Provinces, the Punjab and Oudh. There are of course remarkable instances of the *Joint Villages* existing in isolation in the area where the prevailing type is the *Ryotwari* or *Severalty* Village, but these can be accounted for by special circumstances.

Mr. Sathianathen then remarks of Maine that his acquaintance with India was chiefly confined to the north, and as in Bengal the *Zemindary* system introduced by Lord Cornwallis has been fatal to the old village institutions, the

great Indian jurist had no other alternative than to study the village system as it prevailed in the North-West Provinces, the Punjab and Oudh. It is only within recent years, that the village organisation, as it still survives in South India, and which undoubtedly bears marks of non-Aryan origin, has been carefully and thoroughly studied. We are not, therefore, surprised at Sir Henry Maine taking for granted that what is applicable to the North-West Provinces is applicable to the whole of India.

Speaking of Orissa Mr. Sathianathen says that it is the India of the Hindu period of history unaffected in most cases by external influences where there is no trace of a common holding or of the settlers forming a body of owners in common. Apart from the historical evidence, there is also an *a priori* evidence. It is a well-known truth that the simple precedes the complex. "The village institution consists" says the eminent jurist Sir Henry "not of single but composite bodies, including a number of classes with various rights and claims the whole constituting a hierarchy." Such an institution is not at all simple.

Though Mr. Sathianathen sides with Mr. Baden-Powell in his refutation of the *Joint Villages* as not the primeval type yet he is not prepared to support his contention that there is no demonstrable connection between the *Joint Village* and the old Aryan races, for the striking parallelism between the Indian village community and the Teutonic mark distinctly points to an Aryan origin.

"If very general language were employed, the description of the Teutonic or Scandinavian village communities," says Sir H. S. Maine, "might actually serve as a description of the same institution in India. There is the arable mark, divided into separate lots but cultivated according to minute customary rules binding on all. There is the waste or common land, out of which the arable mark has been cut, enjoyed as pasture by all the community *pro indiviso*. There is the village consisting of habitations each ruled by a despotic paterfamilias, and there is constantly a council of Government to determine disputes as to custom." Institutions found both in Europe and in India with such striking features of resemblance cannot but be regarded as having a common origin.

The writer then winds up by observing that the origin of the joint-family system and its bearing on the village institution is a problem of profound significance that still stands in need of investigation.

HUXLEY AS A LITERARY MAN.

In the *Century Magazine* for January, an interesting paper on "Huxley as a Literary Man" appears from the pen of Mr. James. E. Ruth of John Hopkins University. "In the early and middle portions of the nineteenth century, ways of thinking that were new and, to the unscientific man, strange were developing in the minds of sober thinkers. Here or there a trickle of physical knowledge or of philosophical argument would filter into the minds of popular readers, but the greater part was eventually stored in such ponderous volumes as those of the synthetic philosophy or of pure science, worlds to many unappreciated, if not unintelligible to their limited knowledge. Hence these things came to the greater world of the average man not as critical truths, but rather as the remote abstractions of a class of dreamers." "An apostle of scientific ways of reasoning," adds the writer, "was demanded to carry the light of truth into the halls of popular thought, to bring home by vigorous, aggressive means the fact that scientific culture was not a dead curiosity, but a practical, all-important philosophy of life. Such a man arose in the person of Huxley. Pre-eminently a scientist, and specially a biologist, every thought was pursued with the method of the laboratory, and every argument was based upon irrefragable fact. Nevertheless, the reasoning therefrom led him into the paths of philosophy, political economy, theological controversy, and ethics."

HUXLEY AND DESCARTES.

Mr. Ruth points out that while he is scientific, there is something about his thought, about his very words, which stamps them as literature in the strictest sense, and even as that kind of literature usually called polite. Let us see what this something is. To do this, compare his style with that of a man who was distinctively a philosopher, and who well nigh apotheosized the cold, clear, dispassionate forms of the logical thinker. As Huxley himself tells us, Descartes was one of the writers who were the fountains of his finest inspiration. Consequently the similarity of thought in the two following passages may be due to the direct influence of one man over the other. Yet notice the contrast of style. Says Descartes:—

"My second maxim was to be as firm and resolute in my actions as I was able, and not to adhere less steadfastly to the most doubtful opinions, when once adopted, than if they had been highly certain; imitating in this the example of travellers who, when they have lost their way in a forest, ought not to wander from side to side, far less remain in one place, but proceed constantly toward the same side in as straight a line as possible, without changing their direction for slight reasons, although perhaps it might be chance alone

which at first determined the selections; for in this way, if they do not exactly reach the point they desire they will come at least in the end to some place that will probably be preferable to the middle of a forest."

This is virtually the same thing as Huxley expresses in these words:

"Next to being right in this world, the best of all things is to be clearly and definitely wrong, because you will come out somewhere. If you go buzzing about between right and wrong, vibrating and fluctuating you come out nowhere; but if you are absolutely and thoroughly and persistently wrong, you must, some of these days, have the extreme good fortune of knocking your head against a fact, and that sets you all straight again."

The idea is the same, the difference obvious. Descartes congratulated himself when he was free from passion. Huxley harnessed passion and sentiment and made them the drawers of his chariot of logic. He does not scorn to arouse sentiment or to use striking metaphors, so long as they in no wise impede the clearness of his reason.

WILL HIS WORKS LIVE?

The writer next considers whether Huxley's works will live in literature. If so what place therein will they occupy?

In regard to the first we can safely say that the larger number of his essays will not endure. These were written for the deciding of questions of the day, and will vanish with the passing of the day. To this class belong most of his controversial papers with Mr. Gladstone. Dr. Wace, and others, and many of those relating to education in science. Again, of the remainder of his work, the larger portion will survive as specialized technical discussions, and not as literature proper. Thus much of his Darwiniana, together with his biological and geological essays, may continue, as at present, popular adaptations of scientific questions, while the essay on Hume has already become an enduring possession of philosophy. Still again, gems of thought in the midst of dry discussions are not literature; nor are newspaper articles, scattered notes, or other such disconnected matter. Thus, much as we may regret it, all such works of Huxley—and they are numerous—will pass away, and this will still further diminish the mass of his permanent artistic achievements. To find, then, his true claims upon the literary world, we must look into the few but priceless essays that remain. These are not collected in one book, but are scattered promiscuously throughout the nine volumes of the last arrangement of his works. Such are the essays of which "The method of Zadiq," "Evolution and Ethics" and the biographical and critical sketch of Joseph Priestley are examples. These will endure as humane literature because they possess those qualities of style and humanitarianism which are the necessary and sufficient conditions of such.

HIS LITERARY MISSION.

"It was not" says Mr. Ruth, "the propounding of new doctrines, for with very few exceptions, his doctrines are not new. Nor was it the popularizing of science, the mere recasting of other people's ideas; for his works not only embody the spirit as well as the grosser materials of the scien-

tist, but are everywhere instinct with something of his own, more vital, more significant.

His most striking characteristics in doctrine and in character were unoriginal. Yet the diversified elements in each were combined into such new and startling wholes as to produce upon the one hand a philosophy of life, and upon the other a character, each distinctly novel and of profound significance. Here were two powerful and original forces. Then personality wedded doctrine, and the result was Huxley as a literary man, a factor in the literary world which combined DeQuincey's literature of knowledge and literature of power. For rarely has knowledge been used with such power as in the hands of Huxley. It was in the construction out of loose truth of workable theories of life and ethics that he excelled. The philosopher finds before him a mass of unsorted facts, and from them builds a scheme of the universe. So Huxley examined the unsorted materials of generations of philosophic and scientific observers of mankind, and adding to these his own copious experience deduced therefrom a code of morals, a practical philosophy, and a workable basis of action for that part of life upon which science touches. In his autobiography he sums up his chief objects, which were "to promote the increase of natural knowledge, and to forward the application of scientific methods of investigation to all the problems of life." He is the exponent of such portion of the theory of how we ought to live as is derivable in this manner.

In regard to Huxley's personality we cannot illustrate by quotation or analyse by parts. It is only by a constant and sympathetic reading of his works that we begin to see in its true light the soul that lies hidden to the casual observer. In this his letters recently published are helpful:—

Two things, however, strike us at the outset, his frank earnestness and his frank pugnacity. There is nothing petty here, no concealment or affectation, none of the theatrical wigs and powder or other trumperies with which so many more eccentric literati see fit to adorn themselves. He was a man who was above facts, who was the master, not the slave, of conventions and customs.

His sincerity required the same soundness of others. Any one who was liberal in view, inclined to gentlemanly and sober discussion, and, above all, unflinchingly honest in his beliefs, he met on equal grounds and treated with courtesy. Any falsehood, however, any shirking of the responsibility of thinking and meeting problems face to face, was to him an abomination, a germ of the most dangerous evil, to be stamped out at any cost and by any means. Those who resorted to such subterfuges he attacked unmercifully, alternately dissecting them spiritually with the keenest sarcasm and overwhelming them with weighty masses of logic—masses, which, in their completeness and force, remind one of nothing so much as the plucked-up hills with which Satan and his angels were overwhelmed. Before his untiring energy there was found no peace for humbugs, dissemblers, or those who wished nothing better than to be left in lazy satisfaction with the accepted order of things. In these controversies he was sometimes too bitter, too fierce, and made use of a sarcasm which, though delicious, was frequently little short of cruel. He was a firebrand, warm enough to his friends, but ready to consume any

opponent—nay, more, looking out for opponents with the keenest scrutiny, lest one might perchance appear upon the far horizon of the world of thought without being favored by his disastrous notice. Moreover, he was hot-tempered, and when roused, sometimes harsh and illiberal; but his nature was of the impulsive kind that apologizes as quickly as it errs, while through his life at all times ran the redeeming vein of humor. It is not an uproarious laugh, but a keen, irresistible little twinkle that comes into the corners of his eyes over the foibles of his neighbors and of himself.

These impulsive characteristics precluded the existence of that calm deliberation which should characterize the philosopher. But what philosophy lost, humanity at large gained. For he was a man who, while reverential to abstract reasoning, held such to be of subordinate importance unless in the end applied in some way to the uplifting of the race. What we see in others is often only the reflection of our own fine or ignoble qualities and the words he penned of Priestley apply with equal force to himself: "He was a man and a citizen before he was a philosopher," one of those "who care even more for freedom of thought than for mere advance of knowledge."

Thus Huxley's character had none of that originality which arises from idiosyncrasy. Such originality as he possessed was due not to startlingly new conceptions of life, but to a new correlation of a number of well-known virtues. It was the unusual grouping of the logic of philosophy, the empiricism of science, the sympathy of humanitarianism, and other diversified elements, which, when compounded into a unified whole, made up a character, new and interesting, though unoriginal in its components.

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THE TRUTH ABOUT THE JESUITS.

Our readers might remember that in August last we published in this column a summary of an article on the "Monita Secreta of the Jesuits," which appeared in the *Humanitarian*. It was a dark picture of the aims and methods of the Jesuits.

A contribution to the *Open Court* for January by M. Henri De Ladeveze, on the "Truth about the Jesuits" presents the side righter, of the question in a very temperate manner.

"Is it not lamentable" he asks, "that in this age of criticism, at a time when so much is said about justice,—but at a time, alas! when justice is more applauded than practised—the Jesuits should still be represented as the black demons of fantastic legends, and that no accusation, however absurd and whatever its origin, has need of proof from the mere fact that it is levelled against them?" There are, however, upright and independent thinkers, who exercise the right of private judgment, who are not influenced by the commonplaces that sway the vulgar mind. It is them the writer addresses.

The Society of Jesus, founded August 15, 1534, in Paris, by Ignatius Loyola and six of his companions, was canonically instituted in September 27, 1540, by the Bull of Pope Paul III., *Regiminis militantis ecclesie*. It comprises, as do all religious orders, two kinds of members: Fathers and Lay Brothers. The Fathers are either priests or destined to become so; but they do not definitely belong to the Society until after they have gone through a very severe and long term of probation of which the stages are as follow:—

After a novitiate of two years, they take the three 'simple' vows of poverty, chastity and obedience, and receive the title of 'approved scholastic'. In this capacity they apply themselves, at their superior's pleasure, either to teaching or to the study of theology, philosophy, literature, or science until, having passed ten years in the Society and having attained the age of thirty at least, they are elevated to the rank of 'spiritual conditor.' From that moment they are eligible for all the posts of the Institute, with one or two exceptions.

Ultimately, after they have been tested during a further term of several years, one of the three following decisions is come to with respect to them.

1. Either they are allowed to make their solemn profession, which includes the vow of obedience to the Pope, peculiar to the Society of Jesus, and thus become professed Jesuits; they then belong irrevocably to the Order; they are, in short, really Jesuits and can occupy the posts that were closed to them hitherto.

2. Or, if they are found wanting in any of the necessary qualifications, they are retained with the title of Jesuit of the three vows, which confers no further prerogatives.

3. Or they are expelled from the Institute.

The Lay-Brothers, who are much less numerous, take their vows after ten years' trial if they are thirty years old at least. They are called "temporal brothers" and are employed as porters, cooks, sacristans, etc.

The writer then gives a detailed description of the powers of the head of the Jesuits:—

The Society of Jesus has really but one head, the General, who, before the suppression of the temporal power of the Pope, resided at the Gesù in Rome. He must be a professed Jesuit of the four vows, and it is the professed Jesuits of the four vows only who take part in his election, which is by secret ballot. He has four "assistants" to help him, and an "admonisher," elected in the same way as himself, to keep him in, or, if need be, to bring him back to the right path. The electors of the General have the right of deposing him if he is guilty of a serious fault; in urgent cases the assistants have this right, but they must, however, ask the consent of the professed Jesuits by correspondence before exercising it.

These rules and the constitution of the Society of Jesus, M. Ladeveze considers to be founded upon very wise and very liberal principles."

Very wise, for there is but one authority, and I need not dwell on the advantages accruing from this fact; very liberal, since this authority emanates from the free choice of those who recognise it, and is never in danger of degenerating into tyranny, because it too is subject to the rule whose observance by all, it is its special mission to secure.

There is an additional safeguard against the abuse of character and authority by the head of the Jesuits for,

Once in three years there is in every Province a congregation called *Provinciale*. The deputies, as soon as they arrive in Rome, decide by secret ballot, in the absence of the general, and before commencing their deliberations, whether there be occasion or no for calling together the General Congregation, to which body superintends the task of examining the conduct and administration of the head of the Order.

The writer then proceeds to discuss *seriatim* the several defects pointed out by critics against the constitution and conduct of the Jesuits. He says that many of the rules to which the Jesuits are subjected and against which there has been much strong criticism, are in the main as St. Benedict's which has been adapted with the modifications necessitated by the special object of each, by all religious orders since the 16th century.

It is the same, consequently, in principle, as St. Basil's and those which the cenobites of the Egyptian and Syrian deserts followed under the leadership of such men as St. Antony and St. Pacome, etc. For example, a Jesuit possesses nothing. Now what says St. Benedict? "Let no monk presume to possess anything whatever." Again, the Jesuits must obey their superiors. Now, leaving on one side military obedience, which is much more absolute, much less enlightened, and, above all much less voluntary, note how St. Benedict, ten centuries before the Society of Jesus was founded, required his disciples to obey. Let no one in the monastery do his

heart's will." "As soon as an order has been given them by God they know not what it is to delay its execution an instant. "Monks do not live as they like, they follow neither their desires nor their inclinations, but they let themselves be led by the judgment of others."

Another practice of the Jesuits generally condemned is the supervision they practice amongst themselves. The writer, of course, regrets this sort of mutual supervision but at the same time, he points out that it is generally prevalent even amongst other mendicant orders.

Thus we read in chap. 13 of the *Constitutions of the Preaching Friars*, founded by St. Dominic: "Each one must report to the Superior what he has seen, for fear that vices be concealed from him." And in chap. 17 of the *Constitution of the Friars Minor*, founded by St. Francis of Assisi: "Let none of us profess or believe that he is not obliged to denounce his brother's faults to the superior who must apply the remedy; for according to the sentiments of St. Bonaventura, of the Masters of the Order, and of all the general chapters, it is decided that such an opinion is pestilential and inimical to the Order and to regular discipline."

This supervision, is not imposed by force, as it were, upon its members, as one of the rules to which they must either submit or take their departure; it is proposed to them in this suavest manner possible. "The postulant shall be asked whether, for his greater spiritual good, and above all for his more complete submission and humiliation, it would please him that his faults, his imperfections, and all that may have been noticed in him, should be made known to his superiors by whomsoever should have become aware thereof *apart from confession*." The cup is still bitter, but its rim has been coated with honey.

He next proceeds to explain the reason why the Jesuits undergo a great deal of inward mortification:—

It is difficult to understand the state of mind of a man who having all the requisites of earthly happiness, knocks at the door of their novitiate. And yet youths, magistrates, priests, officers, noblemen, all classes of society, but especially the upper classes, furnish them with recruits, and, in Catholic countries especially, very few names that are to be found in the book of the Peerage, but are inscribed in theirs. How then is one to explain the accusations that are brought with such unrelenting animosity against the Religious who, if they are guilty, have certainly not yielded to personal motives in becoming so? For what could the motive be? Pecuniary advantage? But the greater number of the Jesuits belongs to rich families and had to renounce their fortune to enter the Society. Ambition? But most of the Jesuits occupied enviable positions in the world, some having found them in their emblazoned cradles, others having won them by personal work and merit. Besides, the Order founded by St. Ignatius, which differs from others in so many ways, differs also in this that its members cannot accept any dignity either civil or ecclesiastical; they cannot become either Cardinals, Bishops, or even simple Canons,—unless the Pope forces them so to do on pain of committing mortal sin.

Will any one suggest that, whilst personally free from ambition, the Jesuits are yet ambitious for their Order; and that the evil they commit is done from obedience to insure its prosperity?

Let us argue the question. "I fail to see," said Renan, "why a Papua should be immortal." Let us not be as cruel towards the Jesuits as was the amiable sceptic towards the unfortunate Papuan, and let us allow them to believe that they have a soul; for it is precisely because they believe they have one that they enter the Society of Jesus, in order to work out its salvation more efficaciously. How can we admit after this that, having left the world and having made the greatest sacrifices in order to lead a life less exposed to sin, they should eventually fall so low as to obey a command to sin?

Will some suggest that when they became religious they were not well acquainted with the Institute?

I grant it. But if they do not know it when they first don the costume, they must assuredly know it and know it well, when they take their vows. Nowhere else are so many precautions taken to dissipate illusions and to extinguish superficial ardour. No other body studies its subjects so completely, nor for so long a time, before admitting them; in no other body have the future members so many means of weighing, during so long a period, not in theory only but in practice, the advantages and disadvantages of the engagement they aspire to enter into. One must suppose then that, by a miracle of dissimulation, the Society does not reveal itself in its true character save to the professed Jesuits of the four vows: in that case the reproaches addressed to Jesuits in general would fall upon the former only who would thus become the scape-goats of the flock.

The writer then proceeds to give a historical account of the persecution to which the Jesuits were subject to by several European countries. He maintains, that they were condemned unjustly.

In judging the Jesuits the writer says we must apply the maxim of Marcus Aurelius:—

"There are a thousand circumstances with which we must acquaint ourselves in order to be able to pronounce on the actions of others." If we acquaint ourselves with the "thousand circumstances," and if we study the Jesuits, not as members of a corporation, but as priests and missionaries, we are inevitably compelled to share the opinion that a Protestant writer has so well expressed: "however much one may detest the Jesuits, when religion is allied to intellectual charms, when it is gentlemanly, wears a smiling face and does all gracefully, one is always tempted to believe that the Jesuits have had a hand in the affair.

If we consider them from a purely lay point of view, we are astonished at the services they have rendered. The Jesuits have practised every variety of style with success; eloquence, history, antiquity, geometry, profound and poetic literature: there is hardly a class of writers in which they have not men of the first order."

MUNICIPALISATION OF HOSPITALS.

Miss Honnor Morten, a Member of the London School Board, makes a plain protest in the pages of the latest number of the *Humane Review* against the present system of leaving the treatment of the poor to the care of the voluntary hospitals. She states that about half of the hospital accommodation provided in Great Britain is supported by charity and managed by irresponsible committees; it deals chiefly with accident and general cases and the other half is provided by Borough Councils and Boards of Guardians and deals with fever and pauper cases.

Take London as an example: there are about 10,000 beds in the voluntary hospitals, 6,000 beds in the Metropolitan Asylums Board Fever Hospitals, and 15,000 beds in the poor Law Infirmarys. In addition there are over 1,000,000 out-patients seen annually in the London voluntary hospitals. That is to say, one in every three of London's populations seeks hospital relief of one sort or another; while in some of the northern manufacturing towns the number is equal to one half of the population.

Naturally the question is often raised whether work of such national import ought not to be undertaken by the nation as a whole, and doubt is freely expressed as to the advantages of "charity" in caring for our sick. In these voluntary hospitals if a patient goes in he has to submit to having unscientific filth injected into his body.

Also many hospitals have wards closed, or are not properly equipped, for want of funds. And thirdly the hospitals are put where the doctors want them and not where the patients need them.

After giving an elaborate and vivid description of the unsatisfactory state of several of the voluntary hospitals and the inconvenience to which poor patients are put Miss Morten sums up the reasons for the municipalisation of hospitals :-

- (1) Because it is the duty of the nation as a whole, being responsible for most of the sickness, to care for all those who are sick,
- (2) Because the present system of charity is demoralising, making cadgers of the poor and complacent cads of the rich,
- (3) Because of the waste and extravagance due to the competing of voluntary hospitals for subscriptions, and the advertising appeals, &c. Havelock Ellis says that from 25 to 50 per cent is spent on raising their incomes.
- (4) Because in the desire to advertise many cases treated and many cured, patients are seen hurriedly in the out-patient department and kept long waiting, moribund cases are refused admission, and convalescent cases are discharged too early in order to free the beds.
- (5) Because in the rush for fame the young surgeons now experiment unrestrained, the poor have to submit to empirical treatment, and are denied the right to die in peace or unmolested. The hospital treatment must be accepted, though the treatment of to-day is the quackery of to-morrow.
- (6) Because there should be a network of hospitals all over the kingdom for the benefit of the sick, and not huge barracks in dirty noisy towns for the benefit of the students.

PRICES AND WAGES.

Mr. G. Subramania Iyer, the late well known editor of 'The Hindu' contributes to the January number of *East and West*, a short paper on 'Prices and Wages.' He says :-

Everywhere in the country, more especially among the poorer classes of people, there is a loud wail about the continued high prices of all articles of food. These high prices do good, no doubt, to the more well-to-do class of producers; but all producers in India are not well-to-do. A good deal of the land that has been recently taken up for cultivation is so poor that the cultivator often fails to get out of it the ordinary wages of his labor. But outside this class of the poorer agriculturists there is the larger class of labourers, poorer artisans, domestic servants and menial employees in offices and firms who are deeply affected by the high range of prices, almost on the border of famine rates, during the last fifteen years. At the same time, the wages have remained almost stationary except in regard to the small class of skilled laborers, employed in Government public works or in manufacturing factories.

Mr. Iyer then compares the movement of prices in this country and in European countries and shews some points of contrast :-

In Europe—in England, at all events—prices of necessities have gone down and wages have risen, while the reverse has accrued in India. Mr. Mulhall, writing 18 years ago, says that £ 3 will now buy as much in England as £ 4 would a hundred years ago, and that wages have doubled since 1780, enabling working men to buy 44 p. c. more of food than they could then, notwithstanding the enormous rise in beef and butter. The peasants' earnings, too, measured in grain are 80% higher than, in the eighteenth century. Another point of contrast is that the tendency of expanding commerce between nations has been in other parts of the world towards a lower level of prices while in India it has been towards a higher level.

To sum up, the conclusions of the writer are :-

1. In the beginning of the century a remarkable fall in price took place on account of British rule creating a sudden demand for increased currency and their demand not being supplied,
2. The abolition of the East India Company and the substitution in its place of the direct control of the Crown and the completion of the Suez canal in 1869, led to large investments of money in public works and in British enterprise, thereby largely increasing the amount of the currency. The prices began to rise
3. This continued till 1873, when a period of draughts and famines came, which aggravated the tendency of prices to rise.
4. From 1881 to 1885, comparatively good harvests brought down prices,
5. Since then, although there have been bad as well as good harvests, Indian prices have entered a period of steady and permanent rise, owing to causes of bad harvest and of increased population, these causes chiefly consisting in the influence of European on Indian trades.
6. Prices have risen more rapidly than wages and the effect of commerce, railways and steam navigation have tended to raise the prices to uniform level instead of lowering them as they have done in Europe.

DEPARTMENTAL NOTES.

Educational.

INTELLECTUAL DEVELOPMENT OF EUROPE.

In his excellent book on this subject which is noticed elsewhere, Mr. Crozier discusses the educational methods and institutions which are necessary to give permanence, stability, and continuity to the policy of States. He holds that the object of every system of national education must be to harmonize the institutions of a country with the Bible, which either from tradition or from deliberate forethought it has adopted as its guide in life; and both, with its material and social conditions and environment, and that this is to be effected sometimes by remodelling the institutions in the direction of the Bible, sometimes by reinterpreting the Bible in the direction of the institutions and sometimes by adapting both to the material and social conditions and necessities of the time. He reviews the Bibles of the nations, such as the Jews' Bible, the Koran, the Bible of Rousseau and points out that the Bible of the nations in the future must not be supernatural in origin, but scientific, not fixed and rigid but infinitely plastic and modifiable by the logic of circumstances and events, while having at the same time the general authority, weight and applicability of the laws of nature themselves. But is any such political Bible to be found? Mr. Crozier answers in the affirmative, following the hint contained in the pregnant remark of Carlyle. Universal History is the true epic poem and Universal Divine Scripture whose plenary inspiration no man can question.

He proposes that we should make of the laws running through the evolution of this Universal History our supreme guide in the education of nations and states. In other words, it is the evolution of civilization in general that should be the Bible of the nations for the twentieth century.

SIR JOHN GORST ON EDUCATION.

(FROM HIS BRITISH ASSOCIATION ADDRESS.)

"For the physical and mental development of children it is now admitted to be the interest and duty of a nation in its collective capacity to see that proper schools are provided in which a certain minimum of primary instruction should be free and compulsory for all, and further, secondary instruction should be available for those fitted to profit by it. But there are differences of opinion as to the age at which primary instruction should begin and end; as to the subjects it

should embrace; as to the qualifications which should entitle one to further secondary instruction; as to how far this should be free or how far paid for by the scholar or his parents."

"Examinations are still often regarded as the best instrument for promoting mental progress; and a large proportion of the children in schools, both elementary and secondary, are not really educated at all—they are only prepared for examinations. The delicately expanding intellect is crammed with ill-understood and ill-digested facts, because it is the best way for preparing the scholar to undergo an examination test. Learning to be used for gaining marks is stored in the mind by a mechanical effort of memory, and is forgotten as soon as the class list is published. Intellectual faculties of much greater importance than knowledge, however extensive—as useful to the child whose schooling will cease at fourteen as to the child for whom elementary instruction is but the first step in the ladder of learning—are almost wholly neglected."

"The power of research—the art of acquiring information for one's self—on which the most advanced science depends, may be a proper system to be cultivated in the youngest scholar of the most elementary school. Curiosity and the desire to find out the reason of things is a natural, and to the ignorant, an inconvenient, propensity of almost every child and there lies before the instructor the whole realm of Nature in the knowledge of which this propensity can be cultivated."

"Physical exercises are a proper subject for primary schools, especially in the artificial life led by children in great cities; both those which develop chests and limbs, atrophied by impure air and the want of healthy games, and those which discipline the hand and the eye—the latter to perceive and appreciate more of what is seen, the former to obey more readily and exactly the impulses of the will."

"Special schools for children who are crippled, blind, deaf, feeble-minded, or otherwise afflicted should be provided at the public cost, from motives, not of mere philanthropy, but of enlightened self-interest, so far as they improve the capacity of such children they lighten the burden of the community."

"While primary instruction should be provided for and even enforced upon all, advanced instruction is for the few. It is the interest of the commonwealth at large that every boy and girl showing capacities above the average should be caught and given the best opportunities for developing those capacities. It is not its interest to scatter broadcast a huge system of higher

instruction for any one who chooses to take advantage of it, however unfit to receive it. Such a course is a waste of public resources. The broadcast education is necessarily of an inferior character, as the expenditure which public opinion will at present sanction is only sufficient to provide education of a really high calibre for those whose ultimate attainments will repay the nation for its outlay on their instruction."

"It must not, however, be forgotten that a national system of education has its drawbacks as well as advantages. The most fatal danger is the tendency of public instruction to suppress or absorb, all other agencies, however long established, however excellent their work, and to substitute one uniform mechanical system, destructive alike to present life and future progress."

"There still remains for our consideration the second division of higher education, viz, the applied or technological side. It is in this branch of education that Great Britain is most behind the rest of the world. A few elementary lessons in short-hand, book-keeping will not fit the British people to compete with the commercial enterprise of Germany. There are grades and types of technological instruction, and progress can only be slow. It is useless to accept in the higher branches a student who does not come with a solid foundation on which to build. In such institutions as the Polytechnics at Zurich and Charlottenberg we find the students drawn exclusively from those who have already completed the highest branches of general education."

"The progress made under such a system would at first be slow; the number of students would be few until improvement in our systems of primary and secondary instruction afforded more abundant material on which to work; but our foundation would be on a rock, and every addition we were able to make would be permanent, and would contribute to the final completion of the edifice."

UNIVERSITY REFORM.

In the course of a leading article on University Reform the *Indian Social Reformer* makes the following suggestions for the consideration of the Indian Universities Commission:—

6. The first thing to do is to recognize the principle that the more an educational system gives freedom to the individual, pupil as well as teacher, the more successful is it likely to prove as a means of training honest healthy, intelligent and useful citizens. The present system is so destructive of initiative that no man of any ability can long remain a teacher under it without gradually losing the active powers of his mind. He is only a master in name. In fact, he is a

slave of departmental and University examinations which weigh upon him all his days like a nightmare. Any attempt to instil some amount of sense into the process is sure to be resented by the type of parents who want their children's names printed in the *Gazettes* as early as possible as having passed this or that examination.

The first step the Commission should take must be one which would restore his independence to the teacher. We do not overlook the fact that not a few teachers at present prefer to work the machine by pure muscular effort than to have to put brains into the work, because, of the latter commodity they possess precious little. The Commission's attention should be directed to the subject of how to rid the department of these incapables as promptly as possible. None but really capable men should be tolerated, especially in the higher ranks of teaching, and a public opinion should be created which looks on neglect of his work on the part of a teacher as a crime equal in heinousness to that of a parent who neglects to maintain his offspring.

HINTS TO EXAMINERS.

A correspondent to the *Calcutta University Magazine* make the following suggestions:—

1. Instructions should be issued to all examiners to do their utmost to frustrate the practice of learning answers by heart.

This could be done by refusing to give marks when there was clear evidence that answers had been mechanically committed to memory.

2. Candidates should be formally warned that answers of this nature will not be accepted.

3. The practice of printing in the margin of a paper the number of marks assigned to each question should be discontinued.

These unduly hamper the examiner and mislead the student.

4. It should be clearly given out that standards once fixed will be strictly adhered to.

5. The Entrance Examinations should be made an effective test of such a knowledge of English as is required by a student for the profitable pursuit of his University courses.

Failing the possibility of some test of speaking and understanding English, such a test of the ability to write correct English would be afforded by an English Essay (or letter or other form of composition) carrying an appreciable proportion of the total marks assigned to English, and a high percentage for passing in this paper. A certain number of bad mistakes in grammar should altogether disqualify.

Legal.

THE NEW CIVIL PROCEDURE BILL.

"A Judicial Officer" writes to us:—The subject of entrusting the Subordinate Civil Courts with more extensive powers and of relaxing certain restrictions which hamper the free administration of justice has come up again for discussion in connection with the new Civil Procedure Bill. But the tendency of legislation appears to be to invest the intermediate appellate courts with increased powers of finality. That is where the evil lies.

In paper No. 5 judicial 390, addressed from the Secretary to the Government of India, to the Chief Secretary to the Government of Madras, dated Calcutta, 30th March 1897, certain suggestions are made for the curtailment of appeals. In the New Civil Procedure Bill, there can be no doubt, special attention has been paid to the subject of appeals, and a few remarks on the point may not be out of place.

In that paper, it is observed that "for every appeal in England, there are 240 appeals in India," and that "in comparing India with England, it must be borne in mind that in England there is no intermediate appeal, but that the appeal lies direct from the inferior Court to the High Court." A remedy for the existing state of things cannot be had unless we get at the causes which give rise to the large quantity of appeals. As has been rightly observed, "if the appellate courts were stronger than they are, there would not be any ground of complaint that the number of appeals is so large." I would confine my remarks to this particular phase of the question. It is these intermediate appeals and the extensive powers conferred on them by statute that, in the opinion of many, account for the large speculation that is ripe in the matter of appeals. As the law stands, a single Judge, sitting as First Appellate Court, has the absolute power to decide finally all questions of fact, relating to properties worth Rs. 2500, nay, worth even Rs. 5000 in Districts in which there are Subordinate Judges' Courts. The market value of the property is in most cases, more than the value set down for purposes of court fees and jurisdiction. Whether he confirms or reverses the decision of a District Munsiff, or of a Subordinate Judge, his word is final on questions of fact. In cases of confirmation there is at least the satisfaction that two judicial officers have arrived at concurrent findings. But in cases of reversal, where is the guarantee that justice has been done unless a presumption of infallibility should attach to the decision of a single Judge sitting as a court of appeal? A system of law

that allows finality to a decision arrived at by one single Judge, in reversal of a decision of another Judge, cannot but be characterized as extremely unsatisfactory; it is no wonder that appeals furnish a field for speculation, the final arbitrament being known to rest upon the idiosyncrasies of one single person. The solution that must strike anybody is that the concentration of so much power in one Judge must be done away with. A court of appeal, whether first or second, must consist of no less than two Judges, for "the great advantage of an appellate tribunal presided over by more than one Judge consists in the fact of the prejudice or the bias or the angularities of an individual Judge, being in some measure removed or neutralized by another Judge co-operating with him." And further, where the Court of first Appeal reverses the decision of a Court of first Instance, there should be a right of appeal on facts as well to the High Court. Unless the Courts of First Appeal are thus strengthened, and are imbued with a greater sense of responsibility by the conferring of a right of second appeal where the findings of the two courts do not agree, there can never be improvement upon the existing state of affairs. Though I have advocated a right of appeal, where the law does not now allow it, I venture to think that, instead of augmenting the number of appeals, it will diminish it by checking the unwholesome spirit of speculation that is now largely prevalent.

ANOTHER BLOW TO JURY TRIAL.

The Amrita Bazar Patrika writes:—The main point raised in the last memorial of the Anglo-Indian Defence Association re the Lyall case, published in our issue of the 5th instant, has our hearty approval. Trial by jury, as it exists in England, does not obtain in this country. We have only now the shadow of this privilege, so necessary for the protection of the weak. We enjoyed the real thing some thirty years ago, but, Sir James Stephen as Legal Member of Council, knocked the kernel out of it by legislation and left the shell for us. In short, the verdicts of juries in the mofussil as in England, were final; but, in 1872, a revised Code was passed by which power was given to the judge, if he disagreed with the verdict and considered it necessary for the ends of justice to do so, to submit the case to that High Court, who should deal with it as on an appeal.

Sir James Stephen, while dealing the blow to the life of the jury system, was however good enough to provide some safeguards against the abuse of the power conferred on the District and Sessions Judge. On behalf of the Government of India he thus explained the intention of the Legislature regarding the new provision: "We do

not of course mean that the judge should act in this manner in every case in which he has doubts as to the propriety of the verdict or even in those cases in which he feels that if he had been a juror he would not have returned the same verdict. Our intention is that he should exercise the power in those cases only in which it is necessary to do so in order to prevent a manifest failure of justice."

It is pretty generally known that after the introduction of the above provision, the Judges of the High Courts of India consistently and almost without exception, carried out the intention of the legislature as thus expressed by holding, in cases of acquittal referred to them under the section, that the verdict would not be set aside unless it were shown to be perverse, or such as reasonable men could not have arrived at or to have occasioned a manifest failure of justice.

A new Code was passed in 1882, but the only alteration made affecting the present question was in the direction of still further safe-guarding the verdicts of juries by empowering the Judge to refer only in cases where he disagreed so completely with the verdict that he considered it necessary for the ends of justice to submit the case to the High Court.

For the next ten years no further change was made in the law relating to jury trials. By a Notification, dated the 20th October 1892, however, the Government of Bengal with the sanction of the Government of India, excluded certain offences from trial by jury in Bengal. It may be remembered that this measure aroused the gravest dissatisfaction, and both the Indians and the Europeans made a common cause and offered a united protest.

The result of the agitation was the appointment of a Commission. The Commission, in their report dated, the 24th March 1893, negatived the abolition of trial by jury but suggested certain amendments in section 307 of the Code (the referring section) which were in substance inserted in that Code for the first time by the Act of 1898 to which Justices Prinsep and Stephen referred when convicting Mr. Lyall, setting aside the unanimous verdict of the jury who had acquitted him.

Now the counsel, on behalf of Mr. Lyall, urged that though section 307 required the High Court to consider the entire evidence and give due weight to the opinion of the Judge as well as to the verdict of the jury, it was not intended by the amendment of the section in 1898 to alter or detract from the weight which had previously been given by all the High Courts of India to verdicts, and specially to unanimous verdicts of juries, that the law still was as it had always previously been, that the

verdict must stand unless it could be shown to be manifestly wrong and such as reasonable men could not have arrived at upon the evidence; and that the amendments in 1898 were only intended to explain to Mofussil Judges what, under the law as it existed before, and as now made clear, they had to consider.

Justices Prinsep and Stephen, however, overruled this contention. On the other hand they held in their judgment as follows: "It is not necessary for the prosecution to show that the opinions of the jury are perverse or clearly and manifestly wrong as was held in the cases cited to us which were decided before the law was amended in 1898 and expressed as it now stands. It seems to us that we are now bound to consider the entire evidence in the case, and we are then required to give due weight to the opinions of the Sessions Judge and the jury and not to rely only on the verdict of the jury." Now, this interpretation of law means simply this, that jurors have been reduced to the position of Assessors. And that the final decision rests entirely with the two Judges of the High Court.

The Defence Association, in their memorial, clearly pointed out that the intention of the alterations in section 307 in 1898 was quite the reverse of the construction put upon it by Mr. Justice Prinsep. That the Commissioners were utterly opposed to the view taken of the amendments by Mr. Justice Prinsep is clearly manifest from para. 25 of their report. After quoting with approval the remarks of Sir James Stephen referred to above they add:—

"To encourage disagreement from the verdict of a Jury, or to require a reference in every case in which the Sessions Judge would have come to a different conclusion, would be attended with mischievous results. Among these we may point out that it would by degrees utterly destroy all sense of responsibility among jurors, a feeling which it is desirable to strengthen rather than to impair; and the unfortunate effects that would probably ensue from the removal of all such trials to the High Court to be decided on the bare record and without the advantage of hearing the evidence given."

The finding of Justices Prinsep and Stephen in the Lyall case, if allowed to continue, is sure to bring about "the mischievous results" and "unfortunate effects," as clearly foreshadowed by the Commissioners, in many future references in the High Court. They ought to have convicted Mr. Lyall on the ground of the perverse verdict of the jury and not on the ground they have taken. The ruling is a very dangerous one and all Indian associations ought to enter their protest against it.

Trade & Industry.**THE RECENT INDUSTRIAL EXHIBITION
AT CALCUTTA.**

A European visitor to the late Industrial Exhibition in Beadon Square makes the following remarks on the many interesting sights found there:—

"It was a matter of surprise to me that a greater number of Europeans did not visit the Exhibition. Seldom is an opportunity presented of seeing such fine specimens of Indian Art. But more interesting still to those who are watching the industrial development of India was the section in which actual work was being done. Mr. Havell would have been delighted with the crowds that flocked around the exhibit where the old hand-loom was working by the side of a fly-shuttle loom made on the principle he recommends. An object lesson such as this because any one could see the great difference in the speed with which the weaving was done with the fly shuttle, must do more good than reams of reports or columns of newspaper correspondence on the subject."

What struck the visitor as a remarkable novelty was the "Heliotherm, an ingenious arrangement of mirrors for so focussing the sun's rays as to utilize them for cooking purposes." The following important observation made by the European visitor deserves to be most seriously pondered over by our well-to-do countrymen:—

"The Exhibition certainly indicates the advance made in recent years in many fields of Industry, but it also revealed the reason why so many of the indigenous arts and industries of India have declined to the very verge of extinction. The lack of capital, to which the Maharaja of Kuch Behar referred when presenting the prizes, is lamentably evident, and quite as apparent in many departments is the carelessness in finishing work. One cannot fail to be impressed, however, with the possibilities which the industrial development of India call up, and of the responsibility for directing it along right lines."

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MR. S. P. KELKAR ON WEAVING.

Mr. Kelkar of Bombay delivered a lecture at a recent meeting of the Indian Industrial Association, in the course of which he observed:—

"There are four branches of the process of weaving called winding, warping, sizing and weaving. The first three processes prepare the warp or the lengthwise threads in a piece of cloth. After the warp is put on the loom, the weaver puts the cross threads by means of a shuttle, then the cloth is produced. There are already improved machines for the first two and the fourth processes made in England. They can be at once introduced in our country. English hand loom produces three times the work that our hand-loom does. A few looms have been already introduced in some places in Bengal and they are working with the same result.

But there is no sizing machine suited to the varieties of cloth required in our country. To fill up this gap is my main object. I have designed one machine of this sort but before making a machine actually of my design, I wish to see if simpler machines are in use in Europe where hand-loom weaving is much practised."

With this object Mr. Kelkar visited various places in Europe, seeing several machinery makers, comparing the modes of weaving that prevail in different countries, and making enquiries as to the sizing machines used by hand-loom weavers. Mr. Kelkar wanted to introduce two English machines and make a new sizing machine that would meet the wants of our country weavers; and he has been, to a large extent, successful in his object.

A POWER STATION FOR FRANCE.

The Paris *Figaro* suggests a proposition for increasing the manufacturing power of France. It is to make every river in France from the Pyrenees a source of motive power by building a colossal dam along the north side of the mountain chain so as to convert all the valleys on that side into a succession of reservoirs. When we consider that practically a continuous and cyclopean mass of masonry about 200 miles long would be required, remarks the *Invention*, we begin to have some faint idea of the magnitude of the task. Still it need not all be done at once, and if it were executed, France would have not only a power station without a rival in the world but a water supply on a corresponding scale.

AGRICULTURAL BANKS.

Presiding at the half-yearly meeting of the Bank of Calcutta, Ltd, Mr D. Yule made the following observations on Agricultural Banks :—

A suggestion has been made that the Agricultural Banks might make advances to weavers and mechanics as well as to raiyats and there is no reason why they should not. The Government, however, appear to be in no hurry to set about the institution of these self-help societies, and it is perhaps unwise to be luke-warm in a matter which affects the interests and lives of so large a proportion of the population. By a recent Resolution the Government have endeavoured to show that the inability of the people to struggle through times of scarcity is not due to over-assessment of land. Famines, of course, are due to want of rain or want of seed and cattle, but the inability to live through them is want of money. The raiyat's money has gone. I would not like to say that some of it has not found its way into Sir Edward Law's prosperity Budget, for it is not so long ago that Sir James Westland admitted that the Government of India were not rolling in wealth, and that their inability to advance money was due not to any wilful obstinacy but want of adequate resources. By some means the Government are now in funds and in a position to advance money, and it seems to me that the proposed Agricultural Banks being nothing more nor less than a scheme to use the money of the richer Indian people for the benefit of the raiyats who have none, the Government should take the first step to set this very sensible arrangement to work. The profit on the coinage of new rupees was never dreamed of by Sir James Westland, and as the accumulation seems to be serving no useful purpose now, I would suggest that it be utilised as capital for starting Agricultural Banks in parts of India where most urgently required. There is no doubt the allocation of this large sum for the purpose would induce Indian capitalists to come forward more readily with their aid. The Government cannot expect this most important scheme to succeed if left to the untrained control of already over-worked Civil Servants or to uneducated and untried villagers. The scheme to become a system must be placed in the hands of a thoroughly trained and experienced Indian banker and what is now only a vision will ultimately be a most important factor in the well-being of the people of India.

THE NEEDLE LOOM.

A new loom for the manufacture of ribbons and other fabrics of narrow dimensions has recently been imported into London from the United States, and we understand that it owes its origin to a family of Transatlantic weavers. Its salient feature is the substitution of two needles, one on each side of the ribbon under manufacture, in place of the usual travelling shuttle. These needles have a horizontal movement and carry the thread which is to form the weft of the fabric to and fro, other needles working vertically from below seizing the loop and aiding in the formation of a neat selvedge on both sides of the ribbon. Each needle has its own dependent supply of thread, which it gathers from a fixed cone or spool; and herein lies the chief advantage of the new loom, that enough thread can be carried on these spools for several day's work, so there is no need to stop the machine at frequent intervals to insert freshly wound shuttles. In this way the speed of manufacture is enormously increased.

AN ADMIRABLE CORN-BANK.

In connection with the enquiries now being set on foot as the result of the report of the Agricultural Banks Commission, it is worth while drawing attention to a very interesting and successful experiment which has been made by Rai Parvatisankara Chaudhuri, the Zemindar of Shaitgarh, Teota, who inaugurated a corn-bank eight years ago at Jayaganj, in the Dinajpur District, and has recently extended the scheme to several other villages. The corn-bank is admirable in the simplicity of its working. In a good year the villagers are asked to contribute paddy to the bank, which stores it up and serves it out in bad years. When interest is demanded, and the demanded rate depends on the circumstances of the client, it is repaid, together with the principal, in kind. The Bank at Jayaganj started with a loanable capital of 80 maunds of paddy. It now possesses 770 maunds—an absolute proof of the success of the experiment. The bank is managed by the villagers themselves, and defaulters are dealt with not by appeals to the law but by social ostracism for such a length of time as the panchayet might decide.

Shakespeare's *Macbeth* & the Ruin of Souls.

BY THE HON. WILLIAM MILLER, C.I.E., LL.D.,
Vice-Chancellor, University of Madras.

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Medical.**FALLACIES ABOUT BRAIN WORK.**

Mr. William Matthews, writing in a Philadelphia paper declares that nine-tenths of the alleged breakdowns from excessive brain work are due to other causes. The truth is, he says, that no organ of the body is tougher than the brain. Hard work alone, pure and simple—apart from anxieties and fear, from forced or voluntary stinting of the body's needed supply of food or sleep and the mind's need of social intercourse—does far more to invigorate the brain than to lessen its strength; does more to prolong life than to cut or fray its thread. It is the rarest thing in the world for a man to think himself to death, unless his thoughts run for many years in a monotonous rut—which is detrimental to vigour as a monotonous diet to the digestive functions—or unless his thoughts relate to something very painful, irritating, or distressing. It has been justly said that thought is to the brain what exercise is to the physical organism: it keeps the channels of life clear, the blood-vessels unobstructed, so that the vital fluid courses along them distributing newness of life and vigour of action to the latest hour of existence. On the other hand, the want of thought starves the circulation, and causes men to drivel and sleep in old age—dead to everything but eating and drowsing in the chimney corner. Mr. Matthews asserts that the lives of the great scholars in ancient and modern times show that a student who takes abundant food, sleep, and exercise at regular hours, sits down to his meals in a pleasant mood, rests half an hour afterwards, recreates himself by frequent rides or walks, and commerce with his fellows, may toil over his books 10 or 12 hours a day, and yet live happily till he reaches fourscore years, or even longer.

REMEDY FOR SEA SICKNESS.

PROFESSOR HEINZ, of Erlangen, recommends those who suffer from sea-sickness to draw long and vigorous breaths at frequent intervals. This, he insists, is a complete antidote. But the very simplicity of the preventive is quite enough to keep it from being put unflinching into practice. To continue to draw long breaths at frequent intervals for, say, 12 hours would be no mean physical feat, and we fear that the antidote will soon be discredited because few could consistently follow the directions.

AVERAGE LENGTH OF LIFE.

We are rapidly gaining in the average length of human life. Better sanitation, the enforcement of pre-

cautions against contagious and infectious diseases, and the advancement of surgery and medicine, are causing an even more rapid reduction of the death-rate than the laymen guess. The census bulletin of deaths that occurred in 271 cities of 5,000 population or more shows that 18.6 persons died in 1900 out of every 1,000 whereas in 1890 the number who died in the same cities was 21 out of every 1,000.—*The Invention*.

THE SECRET OF LONGEVITY.

Sir Henry Thompson is a famous physician, and a splendid example of the young old man. He has arrived at the age of 85 years, but is active and hearty to a degree that many men a quarter of a century his juniors might envy. The venerable doctor has just published a little volume in which he gives the world his ideas of the diet and discipline that should be adopted when a man gets on the downward slope of the hill of life, if he would lengthen out his declining days to the greatest extent, and gain the greatest potentiality for activity mental and bodily.

According to Sir Henry "the typical man of eighty or ninety years, still retaining a respectable amount of energy of body and mind, is lean and spare and lives on slender rations." He repudiates indignantly the notion that to be flourishing one must needs be fat, and declares the fear that man who is spare and lean must have something wrong with him to be "insane and mischievous."

In youth he says excess nourishment is taken to compensate for the excess waste caused by great activity and energy. After 50, however, the needs of man gradually diminish, and then it becomes most mischievous to oversupply the body with what it cannot properly consume or get rid of. The following is the programme Sir Henry lays down for the meals of aged people:—"Breakfast at half past eight, after a cup of hot weak tea at seven, lunch at one o'clock or half past, afternoon tea, very weak, and without a single morsel of solid food; dinner at seven and a light supper at eleven."

LONGEVITY OF DOCTORS.

A French statistician has discovered that in the sixteenth century the average duration of a doctor's life was only thirty-six and one-half years. In the seventeenth century it reached forty-five and two-thirds, in the eighteenth century forty-nine and two-third years and at the present time he finds it is fifty-six years. The same inquirer proposes to ascertain whether the average longevity of patients has increased in the same proportion.—*Family Doctor*.

Science.

DR. BOSE'S REMARKABLE EXPERIMENTS.

THE experiments and demonstrations of Professor Bose, the distinguished Calcutta Scientist, have as we have already mentioned, attracted wide attention in Europe. The *Engineering Magazine*, commenting on Professor Bose's recent paper before the British Association, writes - The very thorough study which has been given to this curious action of coherer by Professor Jagadish Chunder Bose renders his paper before the British Association a very important contribution to this branch of the electro-physics, and a brief abstract is of interest. As pointed out in a previous paper by Professor Jagadish Chunder Bose substances may be classified with regard to their sensitiveness to electric radiation into three types, positive, negative, and neutral differentiated by the characteristic curves of variation of current with electromotive forces. In order to study the whole subject from this broad standpoint the author made a number of experiments with a most interesting apparatus which he terms as curvograph. Previous experiments had been made by subjecting particles in a tube to variations of electromotive force by the use of a potentiometer arranged with a sliding contact the position of the slider and the deflection of the galvanometer giving points in a curve. The practical difficulties which were encountered with this apparatus led to the construction of an automatic recording device based upon the same principle. The galvanometer was replaced by a reflecting mirror instrument and the spot of light was reflected downward by a fixed mirror, so that it was thrown upon the surface of a horizontal platform. This platform was connected with the sliding portion of the potentiometer, and bore upon its upper surface a sheet of sensitive photographic paper. The compound motion of the sliding platform and the galvanometer mirror caused a curve to be traced upon the paper, such a curve being characteristic of the materials under examination. It is impracticable to go into the discussion of the results of the experiment in this place, but in the paper of Professor Chunder Bose, which is represented in full in the *Electrician* copies of numerous curves are given and their exhibition of the behaviour of the substances examined is discussed. Briefly the conclusions are that the changes in conductivity which appear are not chemical, but appear to be molecular. The conduction does not obey Ohm's law, but varies with the electro-

motive force issued being independent of it. Certain substances have their conductivity changed under the stress of electric radiation but recover as soon as the stress is removed, thus exhibiting a close analogy to a mechanical stress within the elastic limit. These and a number of other properties are revealed by the curves drawn by this ingenious apparatus, and since we are promised further accounts of later experiments we cannot but anticipate revelations which may materially change accepted notions concerning electric radiations in general as well as the manner of their action in space telegraphy in particular.

A NEW TALKING MACHINE.

In a recent communication to the Institute de France Dr. Marage gave a report of numerous experiments made by him during the past five years resulting in the construction of a siren that reproduces the five fundamental vowels. There is no doubt that he will be able through similar process to obtain, for instance, synthesis of the simple syllables bu, be, bi, bo, bu, and later to reproduce mechanically more complicated forms and finally, any series of words. First there is the larynx formed by the upper cartilages of the trachea, which can be considered as a conduit traversed by a current of air under varying pressure. During phonation this current is interrupted more or less by the vocal chords.

Below the vocal chords are ventricles of Morgagni, especially studied by Dr. Marage, which seem to give rise to the characteristic tone of voice peculiar to each individual. Finally the apparatus of phonation is completed by the pharynx, the nose and the mouth, which act as resonators. We may add that the cavity of the mouth, according to the shape given to it, may produce all the notes included in about six octaves. We can judge from this of the immensity of Dr. Marage's field of investigation.

Abandoning the older method of Helmholtz, Koenig, Hermann, Auerbach, and Bourseul, and perfecting the more recent ones of Schneebel and Samojloff, the doctor constructed an apparatus permitting him to photograph the vibrations produced in a given time by the pronunciation of each of the vowels. In this manner he discovered that (French) vowels I, U, OU, were graphically represented by a single vibration; E, EU, O, by a group of two vibrations; and A by a group of three vibrations.

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"The Burden of India"



Deeply impressed by the alarming condition of things portrayed in Mr. Digby's "Prosperous" British India, and eager to find out the truth of his statement "that the net effect of our rule in India has been to impoverish our subjects and to render famine chronic" Mr W. T. Stead addressed a circular letter to several Anglo-Indians and others who have made a special study of the condition of India. In the February issue of his *Review of Reviews* Mr. Stead has published a number of replies. Mr. S. S. Thorburn, Sir William Wedderburn, Mr. Dadabhai Naoroji, Mr. Thomas Burt M. P. and Mr. H. Stanley Newman of the *Bombay Guardian* Mission Press—all these support Mr. Digby; on the other hand, Sir George Birdwood, Sir Auckland Colvin, Sir Lepel Griffin, the late Sir Richard Temple, Mr. F. H. Skrine, Sir Roper Lethbridge and Mr. A. P. Sinnett, ex-editor of the *Pioneer*—all these do not agree with Mr. Digby. It is somewhat significant that not one of the distinguished officials who find fault with Mr. Digby have adduced evidence to disprove his statements. Their denial takes the shape of general beliefs, impressions and assertions. Mr. Digby has quoted certain facts and figures. He challenges an inquiry, but the Secretary of State for India and other responsible officials fight shy of it. The memorandum of Sir David Barbour regarding "the incidence of taxation in India" prepared in 1881 and the report of an inquiry into the economic condition of India conducted during the viceroyalty of Lord Dufferin—these two documents which, it is believed, prove a wretched state of affairs have been denied to the public and kept "confidential." Times without number, demands have been made for placing these two papers "on the table of the house" and the answer has always been a systematic "No." Last month Mr. Caine repeated the request to Lord George Hamilton and he was told that it was not considered "expedient

to present it to Parliament." It is suggested that responsible officials keep these documents secret because their publication would bring their administration into contempt. To make the suspicion stronger the Secretary of State and the Viceroy utilise the very same secret documents to construct their own theories of the prosperity of the people, but refuse them to the hostile critics of British rule. The course is neither just nor statesmanly.

The Indian Famine Union.



Though Lord George Hamilton tries his best to evade an inquiry into the economic condition of India yet he is not to be allowed the quite repose which his optimism lulls him into. The members of the "Indian Famine Union" convened a meeting on the 14th ultimo and recorded its surprise and grave disappointment that Lord George Hamilton, after consenting to receive a Deputation on famine prevention, should have withdrawn his consent, and thereby deprived the Signatories of an opportunity of urging the reasons for which an economic enquiry into the condition of typical famine villages is specially desirable at the present time.

The Memorial of the Union is to be forwarded to the Secretary of State for India. We are glad to note that matters will not stop here. They have also resolved (1) to hold a conference with a view to discussing the causes of famines and (2) to convene a public meeting, in order to make it generally known that famine mortality is mainly due to the excessive poverty of the Indian masses and in order to bring home to the British public its responsibility for these recurring national calamities. It is a hopeful sign of the times that Indian affairs occupy greater attention in England at the present moment than it hitherto used to do. Several retired Anglo-Indians have been recently addressing meetings on Indian questions, while the British committee of the Indian National Congress and friends in Parliament like Mr. W.S. Caine are doing their best to promote the cause of India.

The Director-General of Education.

In the very first pronouncement which Lord Curzon made in India in regard to the educational system, he deplored the absence of a central educational authority as a result of which the Supreme Government had failed to exercise the same close supervision over the education department as it had in all other branches of the administration. On another occasion, Lord Curzon emphatically said "I do want some one at head-quarters who will prevent the Government of India from going wrong and who will help us to secure that community of principle and of aim without which we go drifting about like a deserted hulk in chopping seas." In the face of these utterances the appointment of a Director-General of Education will not be a surprise to the public, and it is only to be hoped that the new "expert" will fulfill all the functions described by the Viceroy. Mr. Orange, the nominee, we may mention, was hitherto Private Secretary to the English Board of Education. He was educated at Winchester and New College, Oxford and has had a distinguished University career. It is stated he has had experience in educational work and that he is an authority on primary education.

The University Commission.

The proceedings of this body at Madras, Poona and Calcutta have not given much satisfaction to the public. A great deal of evidence is being collected in regard to the question of the Constitution of Senates and Syndicates while there has not been much attempt to gain evidence on the question of the educational system as it is, and the lines on which reform may be introduced. The holding of the Simla conference *in camera* has given rise to a good deal of suspicion, and we are afraid that the assiduity with which questions are asked of witnesses in regard to the constitution of senates and syndicates gives color to the popular view that the outcome of all this will be the making of the European element in Senates more predominant than it has hitherto been.

It is stated in some quarters that the fact that in Calcutta the native syndics reign has been at the bottom of all this so-called cry for University reform. But we bear in mind the warning of the Viceroy not to attribute motives and shall wait to see what comes about.

The Institute of Science.

Mr. Tata's educational institution for higher scientific research and work is to be called "The Institute of Science" and is to be located at Bangalore. It is to consist of 3 schools, one for the study of Chemistry, another for experimental Science and a third for experimental Biology.

The staff will consist of 3 professors, 3 assistant professors and 6 instructors to be selected from among successful students. Not more than 15 students will be admitted in a year and the course is to extend to 3 years. The initial cost of the institute is likely to come up to 6½ lakhs and the annual expenditure to about £10,000. The Government of India and the Mysore Government are expected to give considerable financial help. Some critics have been apprehending failure of Mr. Tata's scheme in the belief that successful students of the institute will not find suitable employment. Prof. Gajjar of Bombay emphasised this point the other day in his evidence before the Indian University Commission. We are glad, therefore, to read that the interests of successful students of the institute will be looked after.

Natives in the Indian Civil Service.

At a meeting of the East India Association Mr. J. B. Pennington, formerly of Madras, read a brief paper on the question of the further admission of Indians to the Civil Service. Mr. Pennington held that "we should in fact so educate the country that they might become fit to manage their affairs." He felt that the time had come to say that not even the highest post under the crown need be refused to any native who had proved his fitness to hold it. The practical suggestions he made were that the irreducible minimum of Europeans required should be carefully determined year by year, with a *bonafide* intention of keeping the number as low as might be compatible with safety, and that for the remaining vacancies, a sufficient number of the best natives to fill them should be selected in Bombay by some simple, but searching, examination. The successful candidates should be sent over to England at the Government expense to compete again on equal terms for all the services—Home and Colonial as well as India. In the discussion that followed several of the speakers agreed with Mr. Pennington, including Sir Lepel Griffin who was once opposed to increasing the proportion of natives in the civil service.

Mr. Dutt on Land Revenue in India.



Mr. R. C. Dutt has contributed to the *Pioneer* the first instalment of his reply to the resolution of the Government of India concerning land revenue in this country which we referred to in our last number. The chief point which Mr. Dutt answers in the present reply relates to the permanent settlements. Has the permanent settlement done any good to Bengal? The testimony of the ablest officers and the most distinguished statesmen who lived and worked in India, for many years, is that it is a measure dictated by sound policy and calculated to accelerate the development of the resources of India and to ensure the prosperity and contentment of the people. Among them were men like Colebrooke, Lord William Bentick, Sir Thomas Munro, Lord Cornwallis, Marquis of Wellesley, Lord Hastings, and Lord Halifax, Sir Stafford Northcote and a host of other administrators. Many of these were so far convinced of the benefits of a Permanent Settlement that they urged its extension to Northern India, the Ceded and the conquered provinces. Bengal was permanently settled in 1793, and since that date, famines have been rare in that province; in fact, *"there has been no famine within the permanently settled tracts causing any loss of life."* Mr. Dutt asserts that it is the permanent settlement that has saved Bengal from the worst results of famine. The Government of India, however, in their resolution, attribute the prosperity of the Bengal cultivator not to the permanent settlement but to a later legislation, viz., the Rent Acts passed between 1859 and 1885. Mr. Dutt does not deny that the Rent Act was needed for the protection of the Bengal cultivator, but maintains that it only completed the good work done by the former measure, and differs from the Government in their view that the permanent settlement has failed to better the position of the Bengal cultivators.

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EASTERN AND WESTERN IDEALS.

THE terms "eastern" and "western," I need hardly say, are here used not as true or definitive names, but as convenient conventionalisms, serving as pointers. There is no strictly eastern and no strictly western ideal. Easterns and westerns are but men in different circumstances, which at most can but specially foster some forms of bias common to the whole race; and there is not a phase in the life of either that is not to be found, in however different degree, in the other. When Europeans point to the conservatism of Asia as its peculiar mark, they are merely dissembling the fact that conservatism is normal with themselves, and forgetting that every step in their own progress is made against a vast resistance. When they allege the unchangingness of the East, they often take as primordial facts some of its recent changes. The pigtail of China, I gather, is a modern fashion; and the car of Jaganath, I believe, was a post-British innovation in India; yet the average western connects the pigtail with Confucius, and counts Jaganath a typical Hindu institution. We are indeed sure to blunder thus when we make the chimerical hypothesis that any civilisation can subsist without change. Change is the very law of existence. But it matters something, indeed it matters every thing, in terms of what ideal we seek to control our changes.

That no enacted ideal is perfect is implied in saying that all vary. Every thoughtful man, therefore, will admit at once that each might well borrow from the others; that all must have flaws; that each, nevertheless, must have some validity to make it subsist. But the eternal dilemma of civilisation is to reconcile divergent goods; and in so far as men tend to draw their ideal from their practice, never altering that, save on the compulsion of urgent opportunity and average desire, they represent the forces of inertia, of incivilisation, of

frustration. Each order, in virtue of this inertia, looks upon the other with arrogance; and even among the few spirits who see the benefits involved in the different lines of another civilisation, too many are fain to decide that their own good is incompatible with the other, and accordingly incline to belittle even the good they acknowledge. To cast out this bias of particularism, to face the total problem with an open mind, is the great task of the civilisers.

An unexpected but all the more welcome help has been given to them in England by the publication of the little book entitled "Letters from John Chinaman." Four of its letters had appeared in the *Saturday Review*; the remainder, which are the best, being added in the pamphlet reissue. As the collection is not merely a most weighty teaching but cast in admirable English, it is clear that the letters are not really written by a Chinaman: no foreigner could write such a choicely cadenced and finely worded English prose. Nor is the picture it presents of Chinese life credible as a transcript of the actual: it is rather the reflex of a high Chinese ideal, transfigured in the imagination of an Englishman who appreciates that ideal the more keenly because of the contrast it makes to the actuality of his own country. I transcribe a page, to show at once the charm of the style, the pressure of its appeal, and the process of transfiguration the ideal has undergone in a mind which sees it by contrast.

"In China, letters are respected not merely to a degree but in a sense which must seem, I think, to you, unintelligible and overstrained. But there is a reason for it. Our poets and literary men have taught their successors, for long generations, to look for good not in wealth, not in power, not in miscellaneous activity, but in a trained, a choice, an exquisite appreciation of the most simple and universal relations of life. To feel, and in order to feel to express, or at least to understand the expression of all that is lovely in nature, of all that is poignant and sensitive in man, is to us in itself a sufficient end. A rose in a moonlit garden, the shadow of trees on the turf, almond bloom, scent of pine,

the wine-cup and the guitar; these and the pathos of life and death, the long embrace, the hands stretched out in vain, the moment that glides for ever away, with its freight of music and light into the shadow and hush of the haunted past, all that we have, all that eludes us, a bird on the wing, a perfume escaped on the gale—to all these things we are trained to respond, and the response is what we call literature. This we have; this you cannot give us; but this you may so easily take away. Amid the roar of looms it cannot be heard; it cannot be seen in the smoke of factories: it is killed by the wear and the whirl of Western life. And when I look at your business men, the men whom you most admire; when I see them hour after hour, day after day, year after year, toiling in the mill of their forced and undelighted labours; when I see them importing the anxieties of the day into their scant and grudging leisure, and wearing themselves out less by toil than by carking and illiberal cares, I reflect, I confess, with satisfaction on the simpler routine of our ancient industry, and prize, above all your new and dangerous routes, the beaten track so familiar to our accustomed feet that we have leisure, even while we face it, to turn our gaze up to the eternal stars."

It will be granted, I think, that this thrill of appreciation derives less from usage in the life described than from the sense of its charm that comes to the refined outsider, who misses such a vision in his own world. He has enskied the best life of China, and transfigured its possibilities. The Chinese literary club cannot get out of its experience so poignant an aroma of joy as is here achieved through the very sense of privation. For to whom is the rose in the moonlit garden so magical as to the cultured spirit dwelling in a roseless city, where the smoke of volcanic industry clouds the night hardly less than the day? To whom, in fine, is any land so lovely as to those who see it only with visionary eyes, as Italy is seen by a northern poet, pining in the mist, and longing for the purple seas?

But the great fact remains that, though China cannot realise the ideal thus framed, the Chinese mass are placed in a world, and live a life, capable of being so idealised; while the English mass not only are placed in an environment incomparably less fair (it is well and mordantly described in

these letters), but incapable of realising, like the man of letters, what it has missed through such a destiny. And on many English minds of the more fortunate grades the effect of those letters has been singularly strong. Whether it be the felicity with which the writer has drawn the contrast between London grime and squalor and the great Chinese valleys open to the unfailing sun, or the keen pressure of his indictment of the slaughterous and iniquitous European interference in Chinese affairs, or the conjoined weight of the two impressions, the result has been new perceptions, new misgivings, new speculation among a multitude of our readers. They have envisaged a new ideal. Some whom Ruskin did not rouse by his passionate eloquence have been arrested by the controlled intensity of this new voice. Some whose ideas of things Chinese were on a par with the ideas which they credited Chinaman with holding as to Europe, have been surprised into wonder and reverie.

What may come of such a spiritual impact, I do not attempt to forecast. The future is substantially a riddle, when all ideals have had their bearing. But the speculation suggests infinite possibilities, and many hopes. The Gospel of Ruskin had seemed to pass away, yet here is a fresh and fine vibration of its main note. We cannot tell what may not result from the new appeal, new only in the sense that it is so unexpectedly thrown out. For returning to our starting point, we remember that the ideal thus held up is in essence as much western as eastern: it has been cherished by a hundred western teachers who recoiled from the ugliness and desperate haste of our modern industrialism. What has happened to us is that the tyranny of avarice, armed with the stores of coal and iron found beneath our soil, has hurried our population along the path of feverish exploitation, till, as we have said, it is only the more cultured who can realise the beauty of a thoughtful and charmed leisure, the souls of the multitude being sullied to the air they work in. The

problem is, can the enlightened desire of the few, guiding the instinctive aspiration of the many, attain to a compensation? Can the western world (which in our sense includes the American), after attaining through its strenuous activity a mastery of science and a control of natural forces never reached elsewhere, recover its lost birthright of leisure and content?

Such is the problem pressed upon us of the west by the ideal that is partly—only partly, alas!—realised in the east. But to state it is to imply that another problem is pressed upon the east by the partly realised ideal of the west—the free and eager play of new ideas, the energetic life of experiment and *willed* change.

Our author, making himself the voice of the conservative ideal of China, treats the two ideals as incompatible. Let the western regimen, he argues, lay hold of the east, and the precious treasure of leisurely content and contemplation will be lost. Writing not a treatise but a message and a warning, he takes for granted that where the ideal of change and struggle enters, the western evils of joyless toil and aesthetic poverty must come with it. And he is no doubt right in holding that if China should enter on the path of economic evolution in the same empirical and haphazard fashion as that in which England has trodden it, if she proceeds to work her coal and iron on the *laissez-faire* plan, as Japan is doing with her labour-power in the matter of manufactures, she will undoubtedly set up the same phenomena of blind exploitation and self-frustrating competition. But is there no alternative? To enjoy the sun, the pageant of nature, the delight of contemplation and of feeling brooding on itself, must the wise man of the east for ever renounce the excitement of conscious change, the thrilling birthpang of new conceptions the sense of opening the eyes on a new order?

I confess that I hope for little moral gain from the mere economic evolution of China on western lines unless it be controlled somewhat as the deepest—thinking reformers of Europe insist on control-

ling economic evolution there. At heart indeed I doubt whether any civilisation will be broadly fair until the sinister ministry of coal is done with, and all men live in the sun, drawing their forces from its living energy. When we remember that the exhaustion of coal is only a matter of time, we can hardly refuse to admit that the ideal civilisation will be that which has learned to dispense with it. But there is a moral, an intellectual side to the problem as well as the material, the economic. And on the intellectual side the problem is much the same for India as for China.

I do not at all seek to emphasise the actual physical evils of life in the east, as they are set forth in many western treatises, such as that of the French Dr. J. J. Matignon on *Superstition, crime, et Misère en Chine*," or in any of the studies of Hindu life as apart from the horrors of famine, which may in large measure be set down to an imperfect system of Government. I merely note, on that side, that the eastern world must face the problem of over-population as the western world is latterly doing, and that the ideal of leisurely content can never be realised by the mass in China or anywhere else while the dilemma of population is unsolved. What I want to stress here is the mental side of the issue. The Chinese ideal, as set forth by our English author in his beautiful prose, is not the whole reality even for those who best live their lives in China. If western struggle has involved aesthetic atrophy equally has eastern conservatism involved a certain anebylosis of the intelligence. Chinese intellect, like the Chinese woman, walks on bound feet.

Here again we are dealing with a universal form of bias. There are myriads of men in the western world who, if they could, would have all things ruled by ancient law and lore; and for many centuries their ancestors here were able to impose the dead band of the past on the living present. What has happened is that the forward-looking minds, helped by economic changes and the social changes they involve,

have been in certain ways too strong for the past worshippers. Economic changes, as we have implied, occur, as it were, unconsciously, most men welcoming change in the shape of a way to wealth. These changes beget others, and intellectual movement is made without the intention of many who have furthered it. Thus has been shaken, in most European countries, the intellectual yoke of the past; and thus it has come about that in these countries the more intelligent regard the intellectual life as consisting, not wholly but largely, in an open-minded outlook on the new day, a readiness for, nay, an expectation of new ideas, superseding the old. This is what we specially mean by the western ideal; and we who welcome such an utterance as that of the "Letters," recognising the truth in their purport, are just as convinced that the ideal life should be open-minded and forward-looking as that it should be leisurely and pleasurable.

It is not merely that we value the stimulus of new thought, fresh criticism, as a pleasure in itself, but that we hold it to be a condition of mental health. No man appreciated more than the American Emerson the importance of getting the essence out of life; no man protested more urgently against the folly of letting "the means to life" override its ends. He saw the evil not only in the driven life of the towns but in that of the over-toiling country; pressing home the saying, struck out by obscurer men before him, that he who is eager to own land finds ere long that the land owns him. Emerson declined to weed his own garden when he found that it meant losing, in trivialities, a morning's happy contemplation and reverie. But he it was who framed the uncompromising phrase, "The past turns to snakes." He meant that the stranded ship rots; that the anchored mind stupefies; that when men settle down to living by ancient rule, because it is ancient rule, they tend to lose the moral vision which discerns whether a rule is good or bad. To say that Confucius, or another, or a whole Sanhedrim

of ancients, have found out the truth for us, is to consent at once to be much poorer creatures than the ancients, who in the terms of the case found it out for themselves. Once the surrender of individuality has begun, decline must continue. When I am told that in China there is industry, peace, and happiness, I know that China cannot be wholly past worshipping: there must be much fresh use of the intelligence to keep any realm substantially sound. But when I am also told that in China the past is the worshipped ideal of multitudes, I need no one to tell me that in China there is also much sorrow, much limitation of life, much misery that might have been spared. To my thinking, it cannot be otherwise. Stunted minds stand for pain, no less than stunted feet.

Such then is the vital part of the message of the west to the east, in exchange for that vital message of the east which has just been put to us in western words. Rationally speaking, each can profit. It did not need the example of Japan to show that what shallow westerners call "the unchanging east" can change at a rate of speed never seen in the west. We know that the rate of change is a matter of political and economic conditions. And since it is certain that thoughtful men in the west yearn to recover the lost amenity which the east has better preserved (for western teachers have eloquently urged the ideal in past generations,) should it not follow that thoughtful men in the east, knowing as they must in their own experience the value of the free stir of thought, seeing as they must the boon implied in the power to think anew as the sages did of old, must desire to recover the surrendered birthright of perpetual mental renewal? On this there might be concurrence between men of the most differing phraseologies in matters of philosophy. He who conceives of the power of the universe as a personality is paying that personality a poor homage if he declares him to have laid down for men, once in the past, a way of thought and life which they must tread as unchangingly as the stars in their courses, thus

making mind a mere variety of machine, in which the power of choice and will is after all to achieve only what a machine or a ploughing ox may. And he who knows nothing of personality save as manifested in life, and holds the universe for an eternal sequence, knows too that the latest play of thought and will is a product not merely of the last antecedent, but of the whole infinitude of things, and has thus the same causal reality as the antecedents had. On either view, the indefeasible claim of individuality is clear; and he who gainsays or blasphemes it, save by way of preaching discipline and self-correction to every individual alike, is approximating to the inorganic as against the organic side of things.

If, then, either the east or the west should fail to learn the other's lesson—the lesson, that is, of its *achieved success* in terms of material and mental well-being, not any of its conflicting codes of dogma or tradition—what will have happened will be a failure of progress, a frustration of good. The western may well say that he will forfeit the eastern charm of leisure and content rather than surrender the compensating virile joy of an evolving mental life: the eastern may well say that he will forfeit that disturbing joy rather than see the ordinary round of things disfigured and bedevilled in the fashion of western industrialism. But to let the colloquy end there: would be to end it like children; and however slow the race may be to shape its course by the light of reason, it is impossible, while we reason at all, not to trust that reason is on the way to reign.

JOHN. M. ROBERTSON.

MALABAR AND ITS FOLK.

A SYSTEMATIC DESCRIPTION OF SOCIAL
CUSTOMS AND INSTITUTIONS OF MALABAR

by T. K. GOPAL PANIKKAR, B.A.


WITH AN INTRODUCTION BY THE

Rev. F. W. KELLETT, M.A., F.M.U.

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THE ANGLO-JAPANESE AGREEMENT.

LL commercial nations will welcome the new alliance between England and Japan. The only power which will not like the new arrangement will be Russia. The importance of the combination can hardly be appreciated by those who do not have before them a full view of the political situation in the Far East. To the student of the Chinese question—the possible alliance between these two Powers came up as a possibility in 1894, when Japan pricked the bubble of the hitherto supposed strength of the Chinese military and naval forces. That war, which ushered in little Japan as the only Asiatic nation admitted into the circle of European Powers, brought not only humiliation to ancient Cathay but also dire calamities of a critical nature.

The Sick Man of the Far East, as China has been called by some politicians, became conscious at last that the Japanese war, like lightning, cleared the sky, and, when too late, the Chinese government realised that the fear of her might, inspired by ignorance of her real internal condition, have vanished with the collapse of her costly navy and seemingly impregnable fortresses; the Christian nations of Europe were already drawing up maps indicating spheres of influence and were making arrangements for the partition of the Celestial Empire. The unexpected coalition between Russia and France backed up by Germany to demand from the Japanese their retrocession of the Liaotung Peninsula caused a thrill of excitement in the Far East. If the miserable failure of the Chinese troops was a painful surprise to the friends of China—the audacity of the Muscovite note to triumphant Japan meant that diplomacy in the Far East had assumed a new shape. In place of tedious bickerings and ceremonious interchange of diplomatic quibbles—all suavities of language and etiquette were to give way to the unequivocal and prompt challenge to war. Russia had been playing her own game. She had counted all the

cost. She had matured the details of a huge aggrandisement. But there was Great Britain in the way. Victorious Japan would not quietly forego the fruits of her conquests without very cogent reasons. It was then that Russia coquetted with France and inveigled Germany into that notorious compact which ultimately succeeded in driving the Japanese away from the mainland of Asia. The coalition demanded the withdrawal of Japanese troops from Liaotung as the three Powers considered that the permanent occupation of Manchuria by Japan would imperil the permanent peace of the Orient. This was the ostensible excuse for interference. What the exact motives were could only be guessed. Subsequent events, however, indicate that the real reason for the coalition was something altogether ignoble. As soon as the Japanese agreed to go, China had to find the money to compensate her. Then the cloven hoof of Muscovite friendship for China shewed itself. Russia promptly leased Port Arthur, Germany on some flimsy pretext pounced upon Kiaochow in Shantung province, while the French hesitated in a sort of dilemma between taking a littoral province or extending her Protectorate into Yunnan along the Mekong valley. At last the French had to satisfy themselves with Kwong Chow-Wan opposite Hainan island as a convenient objective whence the French could swoop down upon that coveted island whenever a suitable opportunity offered itself. After all this activity on the part of the three Powers—every one expected England to make some great counter-move. The lease of Wei-hai-Wei gave nobody any surprise and the declaration by Britain that her sphere of influence lay in the Yang-tze valley was only met by request from Russia that Britain might agree to regard Manchuria as being within the Russian sphere. Even Italy tried to get a slice of fallen China. But even the worm turned at last. Two forces were set at work by the rapacity of contending European nations. The more advanced section of the Chinese literati

followed in the wake of K'ang-yu-wei in hoping to rejuvenate the old empire by means of political, social and judicial reforms so that the finance and the military and naval forces might be strengthened. The reformers had the example of Japan before them. Alas! they had no sympathy from the representatives of the Powers. They pleaded in vain for interference on behalf of the cause of progress, liberty and enlightenment but their appeal fell on deaf ears. The conservatives on the other hand resolved to thwart the foreign Powers by rousing up all the accumulating grievances of the common people and to direct the reserved power—the inertia of the millions—against foreign encroachment. The first result was the formation of volunteer train bands which ultimately developed into the Boxer revolution.

Meanwhile, diplomacy in Peking assumed a new turn. Threats of violence superseded the erstwhile civilities at the Tsungli Yamen. China had no power to resist any sort of demand and consequently resorted to the old policy of setting one State against another. This tactic was well known in ancient China especially at the close of the feudal period. The outbreak of the epidemic insanity known as the Boxer cult among the peasants of North China culminated in the siege of the Legations. While the Powers were concentrating towards Peking, Russia was playing her own game in Manchuria. Through some misunderstanding, the Chinese forts on the southern bank of the Amur opened fire on some Russian ships. This was sufficient excuse for the Russians to massacre some five thousand odd innocent Chinese men, women and children at the town of Blagoveschensk. There has been no attempt to deny this tragedy. The general who carried out the order has even been promoted after a temporary suspension and removal from the East. The Cossacks invaded Manchuria and sacked and pillaged the Manchurian cities. In October 1900, Russia had complete domination over the whole of Manchuria, holding the capitals of the three provinces and interfering in every

way with the acts of Government. Even the port of Newchudry which under the treaty between China and the Powers is a free-port was seized, and administered as a Russian port. The ruthless manner in which the Chinese and Manchu peasants were handled caused countless numbers to flock to North China or to return to the different provinces whence they had migrated to Manchuria. This was what Russia wanted. She resolved to plant down colonies of Russians.

Japan could hardly bear with equanimity the prospect of a Russian colony in the vicinity of Korea and actually in the territory vacuated by her on the representation of Russia, France and Germany that the permanent occupation of it by a foreign Power was not desirable in the interests of the peace of the Orient. Representations were made by Japan but the Russians returned equivocal replies. They did not believe in partition of China. They were in Manchuria only to safeguard their interests. They would leave when they thought fit. Obviously, the situation was very unsatisfactory. The political out-look consequently became very dark and war between Russia and Japan became a frequent topic of press discussion or private debate. Japanese politicians too have been preparing for what they considered the inevitable outcome. The only question was what would be the "psychological moment" for the war to begin.

The Anglo-Japanese alliance has now dispelled this war cloud, which had been lowering in the horizon during the past year. The provisions of the treaty are so reasonable and practical that no sane person could object to them. Of course Russia can hardly be pleased and yet Russia has accepted the situation with calmness and even satisfaction. She always does, but nevertheless, she schemes away and plots on to work out her destiny in her own slavonic fashion. The dispatch of M. Sievers, a member of the Foreign Ministry to Yokohama,—means that Russia will not allow her interests to be imperilled by this *entente*

between England and Japan. Let us hope that Russia will not attempt to carry out her policy of aggrandisement in North China and Manchuria for, if she did, war between her and Japan would be inevitable. With the Anglo-Japanese treaty as a reality it is easy to see on which side of the scale the Chinese Government will throw itself. Should France join issue with Russia, England would have to come in and a general war would be the consequence. The results must be momentous. It might mean perhaps cession of Eastern Siberia to Japan, and the liberation of Annam and Cambodia from the thralldom of the French! Is this merely a dream of a visionary? Scarcely. French Indo-China would be in a very unhappy situation in such a war. Internal rebellion would be certain to ensue. The Chinese irregulars and regulars could pour in from the north. Troops from India and Australia and the Straits would land at available points within six months. Russia and France might be driven from the settlements on the Pacific shores. For these obvious reasons, we believe the Powers will take due precaution. France has nothing to gain by war. Russia may not lose much but has everything in her favour if success is a possibility. This uncertainty may act as a stimulus just as a gambler's 'chance' does. Anyhow the position of the Powers in the Far East is now clearly defined. The chances of war are much reduced. When Russia meditates taking over all Manchuria as her exclusive possession, she will carry out her intention at her own peril. On this account the announcement that Manchuria is included as an integral part of China in the purview of the Anglo-Japanese treaty, is very satisfactory. There are many reasons why Manchuria should be so regarded, although Germany, not wishing to offend the susceptibilities of her European neighbour, purposely declared that Manchuria was not embraced as part of China in the terms of the Anglo-German understanding. Manchuria could not fall into Russian hands without the Manchu dynasty in China also becoming Russian or Russophile. This result would only be avoided by civil war and revolution. The outcome of the latter could not be foreseen.

The Anglo-Japanese treaty means peace. The Chinese Government will feel at liberty to devote itself to the work of reforms without constant dread of foreign aggression. Trade and commerce will be benefited. Nobody can be the loser except, perhaps, some unhappy Russians haunted by the ghost of Peter the Great.

LIM BOON KENG.

AGREEMENT BETWEEN GREAT BRITAIN AND JAPAN, SIGNED AT LONDON, JANUARY 30, 1902.

The Governments of Great Britain and Japan, actuated solely by a desire to maintain the "status quo" and general peace in the extreme East, being moreover specially interested in maintaining the independence and territorial integrity of the Empire of China and the Empire of Corea, and in securing equal opportunities in those countries for the commerce and industry of all nations, hereby agree as follows:—

I. The High Contracting Parties, having mutually recognized the independence of China and of Corea, declare themselves to be entirely uninfluenced by any aggressive tendencies in either country. Having in view, however, their special interests, of which those of Great Britain relate principally to China, while Japan, in addition to the interests which she possesses in China, is interested in a peculiar degree politically, as well as commercially and industrially in Corea, the High Contracting Parties recognize that it will be admissible for either of them to take such measures as may be indispensable in order to safeguard those interests if threatened either by the aggressive action of any other Power, or by disturbances arising in China or Corea, and necessitating the intervention of either of the High Contracting Parties for the protection of the lives and property of its subjects.

II. If either Great Britain or Japan, in the defence of their respective interests as above described, should become involved in war with another Power, the other High Contracting Party will maintain a strict neutrality, and use its efforts to prevent other Powers from joining in hostilities against its ally.

III. If in the above even any other Power or Powers should join in hostilities against that ally, the other High Contracting Party will come to its assistance and conduct the war in common, and make peace in mutual agreement with it.

IV. The High Contracting Parties agree that neither of them will, without consulting the other, enter into separate arrangements with another Power to the prejudice of the interests above described.

V. Whenever, in the opinion of either Great Britain or Japan, the above mentioned interests are in jeopardy, the two Governments will communicate with one another fully and frankly.

VI. The present agreement shall come into effect immediately after the date of its signature, and remain in force for five years from that date.

In case neither of the High Contracting Parties should have notified twelve months before the expiration of the said five years the intention of terminating it, it shall remain binding until the expiration of one year from the day on which either of the High Contracting Parties shall have denounced it. But if, when the date fixed for its expiration arrives, either ally is actually engaged in war the alliance shall, *ipso facto* continue until peace is concluded.

In faith whereof, the undersigned, duly authorized by their respective Governments, have signed this agreement, and have affixed thereto their seals.

Done in duplicate at London, the 30th January 1902
(L. S.) (Signed) Lansdowne, His Britannic Majesty's Principal Secretary of State for Foreign Affairs.

(L. S.) (Signed) Hayashi, Envoy Extraordinary and Minister Plenipotentiary of His Majesty the Emperor of Japan at the Court of St. James.

THE PHILOSOPHY OF MAETERLINCK.

TWO years have passed since John Ruskin, whom many of us will ever deem the greatest of English philosophers, passed into the realms of the Unseen, and took his place in the ranks of the Immortals. And in that interval none has arisen to wear his mantle. Herbert Spencer, it is true, is still with us, but it can hardly be expected at his time of life, that he will add much to the matchless gifts with which he has already enriched our race, and while writers like Mr. John Morley and Mr. Frederic Harrison continue to delight us with brilliant essays, it is only at rarest intervals that the critic consents to philosophize, and that we come across a philosophic gem like that noble passage in Mr. Morley's *Voltaire*: "A man will already be in no mean paradise, if at the hour of sunset a good hope shall fall upon him like harmonies of music, that the earth shall still be fair, and the happiness of every feeling creature still receive a constant augmentation, and yet each good cause find yet worthy defenders, when the memory of his own poor name and personality has long been blotted out of the brief recollection of men for ever." Still those of us who think with Emerson, that "the poets who, from the intellectual kingdom, feed the thought and imagination with ideas and pictures, which raise men out of the world of corn and money, and console them for the meanness of labour and traffic," are a higher class than that which the economist calls producers, have no reason for despair. For though in England itself the Chair of Philosophy remains unfilled, a comet of dazzling brilliance has arisen across the water in the person of Mr. Maurice Maeterlinck, and by a stroke of unparalleled good fortune he has found in his friend and pupil, Mr. Alfred Sutro, a translator, who, himself a poet, has become so imbued with the spirit of his master, that it is often difficult to decide whether the palm for beauty of expression

should be awarded to the translation or the original.

Maurice Maeterlinck was brought up in a Jesuit College, but his reason, like Earnest Renan's, early revolted against teaching, whose unvarying burden was Hell and the wrath of God. No doubt though both schooling and environment had more than a passing influence on his mind, his boyhood and early youth were spent in almost complete isolation from the world, practically the only human beings he saw, apart from the priests, being the Flemish peasants he used to pass daily on his way to and from school, squatting at the threshold of their huts as the custom in Belgium is, as lethargic and speechless and contented as the ryots of an Indian village. The lonely boy, who had no playmate of his own age, and who appears never to have had any opportunity of indulging in the ordinary recreations of youth eagerly devoured such books as he could lay hands on. Shakespeare and Goethe and Heine were his favourites, and we can readily picture him hurrying home from the uncongenial convent to the companionship of these sages. At last he ventured on a book himself, and though his earliest efforts were little more than prettily-worded dream fantasies, we still can trace from the very first that curious sense of, and eager thirst for, the Beautiful, which as he advanced from *Serres Chaudes* and *La Princesse Madeleine* to *Pelleas et Melisandre* became the dominant note of his writing. *Pelleas et Melisandre* is a simple pathetic love story of a boy and girl. In *Aglavaine et Selysette*, the next stepping-stone, the passionless, almost unconscious, love of the two children is succeeded by the great burning passion of a man and woman. The dreamer is drawing nearer to the sea of life. Only one strip of sand remained, and that was finally crossed in the *Treasure of the Humble*. Pure unadulterated mysticism as it is, it is a magnificent tribute to the yearnings of his youth. The opening chapter on "Silence" is exquisitely beautiful, and the "noble thoughts that

come to every man, passing across his breast like great white birds," are scattered like dew drops about its pages. We are not all born to rule kingdoms, or to do great deeds. Failure comes oftener than success, and the beaten track is a commoner lot than the flower-strown path. Had therefore M. Maeterlinck never emerged from the mysticism that enwrapped his earlier years to the clearer daylight of actual existence, he had still conferred with this Treasure a priceless boon on thousands of humble souls. But his was too great a genius to be content with exquisite visions. "All that he sees, I know," said the philosopher Abu Ali Seena after conferring with the mystic Abul Khain, and M. Maeterlinck was determined to "know" by careful philosophic dissection what in his mystic days he had only "seen." *Wisdom and Destiny* is the result of his resolve. "It is as though," writes his translator, "he had forsaken the canals he loves so well,—the green, calm motionless canals, that faithfully mirror the silent trees and moss covered roofs—and had adventured boldly, unhesitatingly, on the broad river of life." In a word Maeterlinck the mystic, has become Maeterlinck the philosopher, and it is my object in this article to endeavour briefly to summarise his philosophy.

To this end, it will be convenient first to describe M. Maeterlinck's attitude in regard to general principles, and then to deal with his application of the principles he adopts to some of the specific circumstances—such as sorrow or disappointment—that affect the life of man. There are certain axioms no teacher of philosophy can escape. That virtue brings its own reward, that the good are happier than the wicked, that renunciation and self-sacrifice in the end bring the greatest enjoyment to the individual who renounces,—these are truisms common to every system. It is not surprising therefore to find M. Maeterlinck adopting them as the keynote of his. "Above all," he urges, "let us never forget that an act of goodness is in itself an act of happiness. It is the flower of

a long inner life of joy and contentment, it tells of peaceful hours and days in the sunniest heights of our soul." This pronouncement is affected by no consideration of a divine sanction, for his conception of a deity, so far as he has one at all, is of a "God who sits smiling on a mountain, and to whom our gravest offences are only as the naughtiness of puppies playing on the hearth-rug." But he is never tired of emphasizing the inviolable law that wrongdoing brings its own punishment, and that "he who is morally right *must* be happier than he who is wrong, though the wrong may be done from the height of a throne." His comments on Balzac's story of the Rogrons well illustrate his attitude throughout. A poor orphan child, named Pierrette, was snatched away by her evil star from the grand parents, who adored her, and transferred to the care of an uncle and aunt, who instinctively hated her. They persecuted her in every conceivable way, robbed her of her money, prevented her marriage, and made her life so unbearable, that when at length she died, death seemed a welcome release. "How the social villainies of this world would thrive if there were no God," adds Balzac by way of comment to his story. But M. Maeterlinck eschews the idea of future reward and punishment and claims both that "little Pierrette miserable though she was, and cruelly tormented, did yet experience joys that her tyrants never will know," and that the punishment the Rogrons suffered in stifling the happiness within themselves, renders them far more pitiable than their persecuted victim. "The body may revel in ill-gotten pleasure, but virtue alone can bring contentment to the soul. Some slight intellectual satisfaction there may be in the doing of evil, but none the less does each wrongful deed clip the wings of our thoughts, till at length they can only crawl amidst all that is fleeting and personal."

It may be objected that happiness and not morality is the centre of this teaching. And no doubt the objection would be sustainable. But while I readily admit that the lever is not perhaps

so noble as that of religion, it must be borne in mind that the worshippers of good cannot afford to reject any instrument that tends to bring about the end they desire. To possess a lofty ideal and to pursue it unswervingly, this—and to try and add a little to the sum of human happiness, are the first duties of a man. And, if some, whose minds rebel against the admissions religion demands, are like to be persuaded to aim at a high standard, and to forget themselves in seeking to alleviate the sorrows of others, by the knowledge that such a course will assuredly bring happiness to themselves, any teacher who preaches this doctrine is one more power for good, in a world where there are very many incentives to evil. The highest souls will follow after justice and truth and love under the magnetic influence of these virtues themselves, but it may well be that those who have not yet scaled the lowest rung of the philosophic ladder may be affected in their choice between good and evil by the assurance that the former will open to them a *vista* of unending happiness.

And, after all the quest of happiness has ever been the subject of deepest and most absorbing interest to the sons of men. What is the golden key that shall unlock this jewel of great price to the universe? This is the question M. Maeterlinck sets himself to answer. "To-day, misery," he writes, "is the disease of mankind, as disease is the misery of man. Let us hope that one day all mankind will be happy and wise; and though this day should never rise, to have hoped for it cannot be wrong. In any event, it is helpful to speak of happiness to those who are sad, that thus at least they may learn what it is that happiness means. They are inclined to regard it as something beyond them, extraordinary, out of their reach. But if all who may count themselves happy were to tell, very simply, what it was that brought happiness to them, the others would see that between sorrow and joy, the difference is but as between a gladsome, enlightened acceptance of life and a hostile gloomy submission, between a larger

and harmonious conception and one that is stubborn and narrow." This is his philosopher's stone. There lives not a man but has the elements of happiness within him; all he has to do is to understand his happiness. And the key that shall unlock for him that knowledge is wisdom. Wisdom can conquer destiny, and though men have none but the feeblest influence on external events, they may have all powerful action on that which these events become in themselves. Fatality exists only in certain external disasters; for the sage there is no such thing as *inner* fatality. Love, grief, betrayal affect a man's inner self according as he takes them. The commonplace soul is exalted to an ecstasy by the one and reduced to depths of despair by the other. The wise man acquires profound knowledge of himself by the first, and a loftier faith and wider range of love by the last. "The sage who has attained a certain height will find peace in all things that happen; and the event that saddens him, as other men, carries but an instant, ere it goes to strengthen his deep perception of life. Instinct and destiny are for ever conferring together; they support one another, and rove hand in hand round the man who is not on his guard. And whoever is able to curb the blind force of instinct within him, is able to curb the force of external destiny also."

This is M. Maeterlinck's general principle. He illustrates it alike from the tragedies of Sophocles and Shakespeare and from the dramas of authentic history, and having thus established it, proceeds to shew how it may effect the ordinary incidents of every day life. No destiny can be contemplated more awful than that of Oedipus, who murdered his Father and all unwitting profaned the couch of his Mother. But had Oedipus possessed the inner refuge that Marcus Aurelius had been able to erect in himself, he would "have taken calamity to him, to all that was purest, most vast, in his soul," and instead of being crushed by his catastrophes, they would but have given him mightier strength. Nor is it con-

ceivable that had some sovereign all-powerful soul, such as that of Jesus Christ, been in Hamlet's place at Elsinore, that grim tragedy would have flown on till it reached the four deaths at the end. Had Louis XVI frankly renounced the follies of royal prerogative, and loyally adopted the new truth and loftier justice that had sprung into being, he had never died on the scaffold. And even death itself, as in the case of the Girondin, Vergniaud, than whom finer character or loftier spirit never breathed, may teach us that "often in the strange conflict between man and his destiny, the question is not how to save the life of our body, but that of our most beautiful feelings, our loftiest thoughts." The penitent thief had to die, but he died eternally happy, because at the very last moment of his life he had been loved, and a Being of infinite wisdom had declared that his soul had not been without value.

And happily for mankind it does not come to most to meet with a destiny as awful as that of Oedipus or Hamlet, or even to have to choose between renouncing a kingdom and facing a violent death. And it is to the ordinary affairs of life that M. Mæterlinck's philosophy is most suited. All of us for instance must expect to drink deep of the cup of sorrow. How may we escape being crushed by despair? The answer is deliberate and clear. "Physical suffering apart, not a single sorrow exists that can touch us except through our thoughts; and whence do our thoughts derive the weapons wherewith they attack or defend us? We suffer but little from suffering itself; but from the manner wherein we accept it, overwhelming sorrow may spring." Suffering there must be, but the wise man will find consolation in a thousand thoughts. When Paulus Æmilius lost both his sons at the moment of a greater triumph than that of any of our African generals, he consoled himself with the thought that fortune had wreaked her jealousy on him and his family, and that she would prove harmless to the Roman people. Had a similar misfortune occurred to Marcus Aurelius, he

would no doubt have exclaimed, "If it be no longer allowed me to love those I loved above all, it is doubtless that I may learn to love those whom I love not yet." The first lesson of life is ruthlessly to crush egotism. We are but atoms in the scheme of the universe. Our wants, our joys, our woes, how unimportant they are, and yet how important we are apt to think them. And however overwhelming the sorrow that afflicts us may seem at first, surely we may gain lasting comfort by turning our thoughts from our own griefs to the griefs of the world outside, and by holding out a hand of sympathy, that sorrow itself has taught us more readily to feel, to those of our fellows who have been even more sorely wounded in the battle of life. Even in the bereavement itself consolation may be forthcoming. Earnest Renan's grief for his sister Henriette was more grateful to his mind than the absence of grief in thousands who have no love to give to a sister, and Carlyle would probably have scorned to exchange the magnificent sorrow that flooded his soul, when he lost the wife he had tenderly loved, for "the superficial conjugal joys of his happiest neighbour in Chelsea." These may seem but empty words, but even if they be, 'twere better surely to be consoled by mere illusion than to be bereft of all consolation. "Happiness and sorrow only exist in ourselves, and all that surround us will turn to angel or devil, according as our heart may be. Joan of Arc held communion with saints, Macbeth with witches; yet were the voices the same." And though for my part I am of opinion that greater consolation is to be found in the beautiful belief that God directs the destiny of all and that "our light affliction which is but for a moment worketh for us a far more exceeding and eternal weight of glory" than in all the teaching of philosophy, it is none the less indubitable that wisdom may temper the sorrow even of those who hold this belief, while to those who do not, she is often the only safeguard against absolute despair.

Nor is it to the sorrow-stricken alone that M. Maeterlinck extends the hand of comfort and advice. There comes a time to most when they discover that for them "golden opportunity" will never unlock the highest destiny. They had thought perchance they would climb over the heads of their fellows to a throne compared to which the Empire of Napoleon would be but child's play. But the years pass by, and they still find themselves undistinguished in the crowd. Are they therefore to be discontented and unhappy? Most certainly not. "The truest man will never be he who desires to be other than man." And there is no reason because we cannot reach the stars that we should refuse to pluck the wild flowers on our path. "Nothing can be less abnormal than the ocean, which covers two-thirds of the globe, and yet nothing is more vast. There is not a thought or feeling, not an act of beauty or nobility, whereof man is capable, but can find complete expression in the simplest, most ordinary life; and he will be most happy whose eyes have learned to detect the hidden smile and mysterious jewels of the myriad, nameless hours." In ourselves we must find happiness. 'Tis folly to scour the heavens for the sake of a comet that never comes, and to disdain to look at the stars, because they can be seen of all. The rain-drops the cloud brings with it, are for him who will hold out his vessel, and in the life of all of us, never a day passes but there will be some drops of happiness we may take up if we will. We may not perchance be as happy as we think we might have been, we may not even possess the great opportunities we fondly persuade ourselves we might make far better use of than those who have them, but we can all of us win for ourselves that *aequanimitas*—evenness of mind—the Emperor Antoninus Pius gave his soldiers as their watch-word on his deathbed, and having won this, we shall possess a jewel of great price, which none can take away from us.

Such is M. Maeterlinck's message. To the Vedantist and to the Christian it will doubtless

appear incomplete. The struggle with Evil till the personal Ego is merged in Infinite Good that is the central feature of the belief of the one, is as conspicuous by its absence from M. Maeterlinck's scheme, as the self-denying abnegation which places all question of personal happiness out of consideration in the ideal life of the other. But Religion is on a different plane to Philosophy. The latter can of its very essence appeal only to the wise and the good, the former seeks to enfold under its mantle the ignorant and the bad. I am satisfied not only that Religion is an essential for the regeneration of the world, but that only the very best and purest,—rare souls, like Antoninus and Aurelius—can escape evil with the assistance they derive from the intellectual reasoning of Philosophy. None the less is the study of Philosophy of vital importance. The difference between a good man and a bad one is that the one will do what is right when he knows it, and the other will not. Philosophy shews the path, Religion offers an inducement whereby hesitating wayfarers may be persuaded to take it. And he who extols, as does M. Maeterlinck, what is beautiful and pure and good, whether the incentive he extends to his disciples to accept his teaching by the sanction of religion or the attainment of happiness, may assuredly be counted among the world's benefactors. When, in addition to this, his message is replete with human sympathy, and brimful of consolation to sorrowing souls, it is certain to go, as his translator claims it will, to the heart of many.

E. LABOUCHERE THORNTON.

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UNIVERSITY EDUCATION IN INDIA.

cannot help thinking that the critics of education—and their number is legion—are guilty of exaggerated pessimism in the view they take of the general results of higher education, and more especially of University education in India. The men who are really competent to speak with any authority on the subject are just a handful, but every anonymous scribbler must needs have his fling at the poor Indian graduate. The time has come to protest strongly against this reckless condemnation of University education, which seems to be the fashion at the present day. The fact is, the majority of critics, who write and speak about University education and its effects, merely echo the sentiments which they obtain at second-hand from a few who, probably with the desire to see certain existing defects remedied, lay undue emphasis on them; and this exaggerated view is echoed and re-echoed throughout the country by the unthinking multitude. Take the criticisms of the Press, Indian and Anglo-Indian; it is the same stereotyped remarks that we notice everywhere. The Indian system encourages cram, pure and simple; the passing of examinations is the one chief aim of the Indian student; the higher education is made subordinate to a rigid system of examinations; the Indian graduate is lacking in originality; he is wanting in practicalness and thoroughness, in habits of exactitude and directness of action; it is his acquisitive faculty, his memory, that is taxed most and his creative faculty is left undeveloped,—these are some of the stereotyped criticisms that are copied from one journal into another, and that are passed from the lip of one platform speaker to another. I do not say there is no truth in these criticisms; but I do say that these defects have been unduly magnified and that such criticisms give a very distorted idea of the great work our Universities are doing.

The spirit of reckless criticism so characteristic of the masses sometimes takes possession of even

educationists. But this is because they apply to Indian Universities, that have not even half a century of history behind them, the standards of judgment which they generally apply to English and continental Universities whose origin is almost lost in the mists of a remote antiquity.

The transplantation into India of Western institutions, which have been the result of centuries of slow and patient experiment, is no doubt one of the greatest benefits which the people of India have derived from Great Britain, but then we shall be committing a great mistake if we judge of the results of such institutions in India which are still exotic, in the same way as we judge English or European institutions of the same kind. This is the mistake committed even by well-meaning critics. Take, for example, the charge of want of originality laid at the door of the Indian graduate. I certainly admit the comparative barrenness of the Indian intellectual field at the present time; but, in judging of the effects of higher education, we must take into consideration the conditions under which Indians are being educated in English. There is no country in the world that presents so striking an anomaly as India does in respect to its intellectual development. Here we have the strangest of incongruities, namely, a vast population being compelled to pursue higher studies by means of an entirely foreign language. Macaulay decided that the Indian people could not be educated by means of their mother-tongue, and the present system of education is the outcome of that decision. No one would deny that the English language stands pre-eminent among the languages of the West; but nevertheless it must be remembered that English is a foreign language, and a most difficult foreign language. The best energies of an Indian youth are, I won't say wasted, but exhausted in acquiring the English language. At a time when an English lad of ten or twelve revels in reading volume after volume of English books, descriptive of nature and of human life, and stores his mind with correct information on

every important subject, the Indian lad spends his whole energy in mastering the rudiments of the English language. I do not for a moment disparage the study of English. We have had our prejudices overthrown, our intellectual tastes purified; we have become inheritors of the intellectual achievements of all the Western nations; but, at the same time, it must be admitted that all this gain has not been without its corresponding loss: loss of energy, loss of creative power, loss of originality. Our acquisitive powers have been tasked to the utmost; no wonder our creative faculties have suffered in consequence. In accounting, therefore, for the comparative barrenness of the Indian intellectual field, we should not lose sight of the barrier of language. When future generations of the Indian races become, through the influence of hereditary transmission, naturalised to the English language, better results may be expected. In the meantime, let us remember that the Indian intellect is undergoing a silent but a most marked transformation, and that it is all the result of Macaulay's Minute. My wonder is that, considering the special limitation of our Universities and the adverse conditions under which they have been working, the results produced intellectually are so favourable. We have already noteworthy instances to shew that the Indian intellect is not simply speculative and assimilative but that it is inventive as well. We have simply to compare America with India, to arrive at a just appreciation of the results of higher education in this land. What immense advantages the Americans have over the Indians in the matter of education, yet the original writers of America can be counted on one's finger's ends. In India we have only had about half a century of English education, and considering what has been accomplished, I, for one, am hopeful of the future.

The mistakes which our Indian graduates commit in English are a perennial source of amusement in certain circles; but even this defect has its extenuating circumstance. I do not defend the

bad English of the average graduate; but I do say that, in passing judgment on his bad English, we must take into consideration the circumstances in which he is placed, and not regard this defect in the use of the English language as a defect due to the system of University education. As for "cramming," it is not the peculiar monopoly of the Indian student. It is met with everywhere.

Or take again the other charge brought against the Indian graduate, namely, that he is wanting in *practicalness* and *general adaptability to new kinds of work*. I have heard it said over and over again that this is due to the education of the Indian graduate being too literary in character, and that the remedy for this is the study of the physical sciences. Now, when it is remembered that the very same charge of want of practicalness is brought against science students as well, it is time for us to look for the cause of this defect elsewhere. The practicalness of the English lad is seen even before he enters school, it is seen in his varied concrete activities. "He has a mechanical turn, and makes kites, toys, tops, &c.: he wanders in search of birds' eggs, moths, butterflies, fish, orchid, and interests himself in things animate and inanimate around him." In one word he brings his practicalness to bear upon his education, and does not derive his practicalness from his education, and this practicalness is partly innate and partly the result of the training that he receives in his home. We are placing the blame on the wrong shoulder if we say that it is University education of a too literary nature that has made our young men utterly unpractical. There is no necessary logical connection between literary studies and the absence of practicalness.

This leads me to speak of the fallacy involved in ascribing to University education defects due to other causes. It is the opinion of Professor Selby of the Bombay Educational Department that it is the absence of ~~stet~~ education of life to supplement that of the college that is one of the greatest drawbacks of the present system of

education. So long as the average Indian home is what it is, so long as the influences brought to bear upon the Indian youth outside the precincts of the college are depressing intellectually, and even stifling morally, there will be serious defects in the products of our Universities. Let us therefore be careful not to ascribe to University education the defects that are directly traceable to other causes.

Having received my University education in England, having travelled widely in Europe and America and seen the working of the different Universities in the West, and having been a teacher in the three Government First Grade colleges in this Presidency for more than fifteen years, I am in a position to compare the average Indian graduate with the average English graduate and the comparison is by no means unfavourable to the former. That the standard of knowledge represented by our Indian examinations is not to be despised will be easily seen from the remarkable success that attends our young men when they go to Oxford or Cambridge to compete with the picked-young men of England, with all their superior advantages, due to enlightened homes and stimulating social environments. I fully admit that an English graduate is superior to an Indian graduate in general information; in what Mathew Arnold calls "openness to ideas," which is culture; in the ease with which he brings his knowledge to bear upon the different activities of life, and in other things that make him more useful as a member of society; but these excellencies are due not so much to his University education as to other influences which supplement the training he receives in the colleges.

I shall not touch upon the moral effects of higher education. Though higher education must not be regarded as the main factor affecting the inner life of the people, still the evidence that the Education Commission was able to obtain has proved beyond doubt that Western education is yielding fruit in rectitude of conduct, zeal in the

performance of duty, and in a higher standard of public morality.

There are, however, in my opinion certain real defects in our Indian University system. The foremost defect seems to be the absence of freedom and elasticity, which prevents the teacher and the student from striking out new and independent lines. Everything is made to conform to a rigid system of examinations which are governed by a rigid system of syllabuses. The University binds fast the hands of the teacher and of the pupil, prescribing not only an arbitrary and multifarious group of subjects, but the actual textbooks that should be taught in each. In England the public schools are allowed to develop along different lines, so that we find one school excelling in Classics, another in Mathematics, another in Science, in Modern languages and so on; and this is possible because each school chooses to work according to different standards and different ideals. Even from the very same school pupils can appear for different examinations, such as the London Matriculation, or the Oxford and Cambridge Local, or for the diploma of the College of Preceptors, &c. This is what I would like to see in India. I should like to see some high schools work for the London Matriculation, others for the Oxford and Cambridge Senior Local. The Madras University should recognize the examinations of other bodies corresponding to the Matriculation. I fear that in this matter of recognizing the examinations of other Universities the Madras University has followed neither a wise nor a liberal policy. This is a matter which I trust will engage the attention of the University Commission. This spirit of exclusiveness is yet another indication of the policy of rigidity I have referred to above.

I am not sure whether the time has not come for us to consider whether the Matriculation examination should not be superseded by some test less rigid, and giving greater scope for freedom in the curricula. If the Government is going to

institute a School Final Examination, it would not be worth while having another examination. If the Final School Examination is conducted by Inspecting officers it will be sufficiently elastic in its scope and it may be substituted for the Matriculation. As it is, the Matriculation examination has become unwieldy, and the difficulty of ensuring the secrecy of the question papers within recent years has led to its being also discredited. The varying nature of the standard not only from year to year but also between one section of the candidates and another, according as their answer papers go to different examiners, has also contributed to make this examination very unpopular.

In order to make the courses for the higher examinations less rigid, I am strongly of opinion that the introduction of Honour and Ordinary courses for the B.A. degree is absolutely necessary. I am speaking with special reference to the Madras University; for some of the other Universities have already adopted this plan in some form or another. Some of the most eminent educationists in India are at one on this point (*vide* the article on "Universities: Actual and Ideal" in the *Calcutta Review*, October 1899; also Professor Selby's article in *East and West* October 1901). The recognition of the distinction between the clever and the ordinary student and the providing of separate courses of study for them form two of the chief characteristics of Universities in the West, and it is this that has tended to the very best intellectual results. "If you take the ablest and least able of our Indian under-graduates and lump them all together in one class and proceed to lecture to them collectively, you must either fritter away the time of the more intelligent, by regulating your teaching by the capacity of the duller-witted, or else you must be content to leave the slower minds behind entirely, with the result of rendering their attendance in the class-room superfluous. In all probability if you have to face the problem practically, in the endeavour to strike a happy medium, you more or less fall into both

errors, and at one and the same time succeed in boring your cleverer pupils and effectually bewildering the more stupid." And, as unfortunately in India, the merit of a professor is measured by the percentage of students he passes, the Indian school-master directs his attention more to the students of mediocre capacity than to the few really clever scholars he has. The *Pioneer* gave expression to an educational fact when it said: "In India the reputation of a College depends on its success in passing fools." I, therefore, think that one of the most urgent reforms needed in the Madras University is—and from what Professor Selby says in *East and West* this would seem to be the need of Bombay too—a *limited Pass course for average ability and an Honour course of quite a different kind for superior ability*.

In making this proposal I am fully aware of the practical difficulty that will have to be met by Colleges in providing the additional staff necessary for teaching several additional courses. But this difficulty should be no excuse for our University continuing the present unsatisfactory system. It is the University that must set up an ideal for the Colleges to follow. Moreover, the practical difficulty itself would be lessened considerably by allowing colleges to concentrate its energies and its resources on the subjects it is best able to teach.

As a further step necessary for making our University system more elastic, I would suggest the lessening the number of examinations and lightening their burden as well. If the Matriculation is abolished or if a School Final Examination takes its place, I would only have the F.A.—which might be made to correspond to the Previous or Little Go of the Cambridge University—and after that only the B.A. (Pass or Honour.) Even the F.A., which is considered to be at present too severe a test—I should like to see made less comprehensive. For the B.A. Honour course I would encourage specialization, and for the Pass course I would suggest two groups of

subjects—one literary and another leaning to the scientific side, insisting of course on English in both the courses. I am speaking from a wide knowledge of the nature of examination in European and American Universities, when I say that our examinations are far too comprehensive, as regards the mass and variety of matter taken up, and consequently far too severe. A great deal has been said about cramming; but surely when we burden our students with these examinations, hardly giving them any time to digest and assimilate what they learn; when we force young men of ordinary attainments into the same groove, which we expect the cleverest young men also to go through, and then complain of "cramming," we are acting most illogically. With "H. R. J." in the *Calcutta Review*, I would advocate strongly the long vacation which is a well-known feature of Oxford and Cambridge. If no leisure be given to the mind to think, to understand, and co-ordinate the knowledge it receives, a kind of mental dyspepsia is induced, and education fails in its most important function, the cultivation of a vigorous intellect. The long vacation should be made an integral part of the University student's work.

The absence of facilities for specialization for the brighter class of Indian students with diverse capacities and natural differences in tastes is also one of greatest drawbacks in the present system. Specialization of study, the concentration of the intellect upon particular branches of knowledge—this is the chief feature of higher education in England; and, strange to say, that is lost sight of in University education in India. One of the chief functions of a University is to enable young men "to follow that line of study systematically to which their aptitudes direct them, under first-rate instruction", but when the brightest young men are made to plod on with the dullest in getting up a multitude of subjects, which have no connection with each other, in which they are required to get a minimum "to

pass," we should not be surprised at the barrenness of results. I feel very strongly on this subject of specialization, for in the encouragement of this lies the future intellectual hope of India.

My personal experience as a Professor has naturally led me to dwell more on the subject of reform in the curricula of studies, but I have also a few words to say on the subject of reform in the constitution of the governing body of the University. The Senate, as it is constituted at present is, I am afraid, a very unwieldy body. I am not against the exclusion of the non-educational element of the Senate. So far as my experience of the Madras Senate is concerned, the presence of the non-educational element it is that has chiefly maintained the spirit of independence and freedom of speech; but, at the same time, the inclusion of men, who take little or no interest in education, who do not attend its meetings regularly even when they are residents of the city, and who have no academic culture is a great anomaly, and the sooner such an element is eliminated the better it will be for the University. The distinction of Fellowship, owing to the indiscriminate way it has been conferred, has come to be regarded as some complimentary title of distinction identical with that of Rao Bahadur or of Dewan Bahadur. Sometimes it is conferred on Europeans who do not care for the compliment in any way. The story is told of an Anglo-Indian gentleman of repute in commercial circles who when he saw his name gazetted as a Fellow of the Madras University, made the remark that it was a shame that only by death he could be rid of such an indignity. The story, whether true or not, shews the esteem in which a Fellowship of an Indian University is held in a certain section of Anglo-Indian Society. The Senate, moreover, seems to have very little to do with the actual governing of the University; whilst the Syndicate, composed of eight members, has somehow come to have thrown on its shoulders the whole burden of the actual working of the machinery. The opinion is gener-

that too much of the responsibility of the work of governing the University rests upon the Syndicate and too little upon the Senate; and hence the feeling of irritation that manifests itself so often in the Madras Senate regarding the usurpation of powers by the Syndicate. I understand that in Allahabad, the Director of Public Instruction and the Principals of all the more important Colleges have seats *ex-officio* on the Syndicate and most of the Professors belong to the Faculty of Arts, the numbers of which are restricted so as to make it a genuine body of professional experts. I should like to see the Syndicate enlarged and the Senate at the same time given a more prominent part even in the executive work of the University. For example, I do not see why committees of the Senate should not be appointed to deal with such matters as the recommendation of exemptions, affiliation of Colleges, nomination of examiners, &c. The Syndicate, as constituted at present, is too small a body to do satisfactorily the manifold duties which somehow or other have devolved upon it. I admit that the Senate at present is something more than a consultative body, but, in order to bring it into greater touch with the University, and make its authority more real it is absolutely necessary to entrust it with part of the work at least connected with the executive.

The different Boards of Studies are doing very little at present and they should also be utilised to a greater extent than hitherto. I do not think that there are any more competent bodies than these Boards of Studies for recommending examiners to the University.

The bond between the University and the Affiliated Colleges should be made closer, by the appointment of Principals of First and Second Grade Colleges as *ex-officio* members of the Senate. I am of course for concentrating the First Grade colleges in the leading cities, but flourishing Second Grade colleges may remain where they are. The rules of affiliation recently passed by the Senate, I am afraid, are more honored in the breach than in the observance. In

order to ensure the closer connection between the University and the Colleges, these rules should be strictly enforced, and for this the appointment of a visiting officer is desirable. The Registrar may be deputed to do this work as he has so little to do during the time examinations are not going on. The post of Assistant Registrar should be revived.

The question of a Teaching University is a very wide one. The example of London cannot be brought forward as an analogy; for, so long as the interests of existing Colleges in South India are so divergent—we have, for example, the Government *versus* the aided College, and the aided Missionary *versus* the aided Native—it would be impossible to unite the existing Colleges on a common teaching basis; but I do not see why there should not be established University Lectureships in the higher branches of study, the lecturers being chosen by the University from the leading Colleges. This will be not only a beginning in the direction of a Teaching University, but will also help to strengthen the bond between the University and Affiliated Colleges. As for the University establishing a separate college, which some of the witnesses before the University Commission seem to contemplate—that would be bringing into existence yet another Government College; for, so long as the connection between the University and Government is what it is at present any reform in that direction will be misconstrued by the public.

In conclusion, I should like to say a word about University Examinations serving as qualifying tests for the Public service. It is the opinion of some that the time has come for severing the present bond between the University and the Public service. I think this would be a very serious mistake indeed. The evidence that was taken by the Education Commission, in 1882, was unanimous in the opinion that the higher tone of the Public service was entirely due to University men being admitted into the service. With all its imperfections the University standard of general qualification, as shown by the graduate, has proved of

the highest value to the Government. If the University test of general qualification is given up, the Government will have to devise another test; and I do not think that any test that Government may devise will be superior to the University test. As it is, the Government requires even graduates to qualify specially for separate branches of its service, but as a general qualifying examination, the examination for the B.A. degree will always stand unrivalled. The Pass degree, I have suggested, may be made specially suited as a qualifying general test for entrance to the Public service.

S. SATHIANADHAN.

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KIM.*

It has been said with some truth that Kipling is not at his best in a long story and that the short story is his *metier*. When we remember "The Light that Failed," "Captains Courageous" and the story about the American railway life—we forget the number of the engine that was the title of the story—we are constrained to believe that this estimate of his powers was to a certain extent true. In "Kim," however, he has reverted to a field he knows perfectly and loves thoroughly—the happy hunting grounds of his youth; and it may be said at the outset that this his most ambitious effort has achieved a success that was denied to his earlier efforts in sustained fiction. The story has much in common with his first essays in the short story as embodied in particular selections from "Plain Tales from the Hills," "In Black and White" and others of that series, and frequently in the course of this story we catch glimpses of characters created in the days when Kipling was on the journalistic staff of the *Civil and Military Gazette* and the *Pioneer* and was brought into contact with the characters he immortalised afterwards. For instance, no one acquainted with the

Punjab of Kipling's days has any doubt as to who Strickland of the Police was, and we catch a momentary glance of the detective genius in the pages of "Kim," thick in the plots and intrigues of the Government of India's Intelligence Department. Then again we see for a somewhat longer stretch another early character. "Lispeth," the comely *paharin*, who formed the subject of the first of his Plain Tales. However, it will save time if we accept the estimate of a critic of a local contemporary who saw in "Kim" the fulfilment of an early promise to produce this story—as the book of Mother Maturin or was it the chronicles of Macintosh Jellaluddin, and take the book as such. The story all are familiar with. It appeared in the pages of the *Cassell's Magazine* as a serial and achieved a great success. Curiously enough, judging from our own experience, the result of publication in serial form and then in book form has had contrary effects. As a rule, a story in instalments, however good it is, fails for obvious reasons; but in the case of "Kim" the effect was the reverse. We followed the adventures of "Kim" through *Cassell's* with sustained interest; but when we came to the story as a whole we found it tedious, and unconvincing in parts. It is not, we believe, the part of the critic to teach the author his business. Kipling set out to write the story of Kim and his Lama, the gentle Buddhist priest from the monastery of Suchzan, in far Tibet, in his visionary dream to find in India, the fabled River of the Arrow, the waters of which, from a Buddhist point of view, wash away all sin. In the course of it he introduced the alluring incidents and adventures of the devoted servants of the Indian Intelligence Department. It may be that we are mistaken—again we speak from our own experience—but we find this subordinate part more entrancing than the chief portion which deals with Kim and his wanderings with the Lama in search of his river. We are still assuming that the story is familiar to our readers, and the comments that follow are

*By Rudyard Kipling. Macmillan & Co., Colonial Library.

based on that assumption. As a description of native life and scenery in Northern India the book stands without rival. I cull at random the following description of the grand Trunk Road, that splendid thoroughfare that runs from Peshawar to Calcutta:—

'And now we come to the Big Road,' said he, after receiving the compliments of Kim; for the Lama was markedly silent. 'It is long since I have ridden this way, but thy boy's talk stirred me. See, Holy One—the Great Road which is the backbone of all Hind. For the most part it is shaded, as here, with four lines of trees; the middle road—all hard—takes the quick traffic. In the days before rail-carriages the Sahibs travelled up and down here in hundreds. Now there are only country-carts and such like. Left and right is the rougher road for the heavy carts—grain and cotton and timber, bhoosa, lime and hides. A man goes in safety here—for at every few *kos* is a police-station. The police are thieves and extortioners (I myself would patrol it with cavalry—young recruits under a strong captain), but at least they do not suffer any rivals. All castes and kinds of men move here. Look! Brahmins and chumars, bankers and tinkers, barbers and bunnias, pilgrims and potters—all the world going and coming. It is to me as a river from which I am withdrawn like a log after a flood.'

And truly the Grand Trunk Road is a wonderful spectacle. It runs straight, bearing without crowding India's traffic for fifteen hundred miles—such a river of life as nowhere else exists in the world.

Or again this fine description of the Himalayas and the region of eternal snow:

Above them, still enormously above them, earth towered away towards the snow-line, where from east to west across hundreds of miles, ruled as with a ruler, the last of the bold birches stopped. Above that in scarps and blocks upheaved, the rocks strove to fight their heads above the white smother. Above these again, changeless since the world's beginning, but changing to every mood of sun and cloud, lay out the eternal snow. They could see blots and blurs on its face where storm and wandering wullie-wa got up to dance. Below them, as they stood, the forest slid away in a sheet of blue-green for mile upon mile; below the forest was a village in its sprinkle of terraced fields and steep grazing-grounds; below the village they knew, though a thunderstorm worried and growled there for the moment, a pitch of twelve or fifteen hundred feet gave to the moist valley where the streams gather that are the mothers of young Sutluj.

Kipling only shares his ability in this direction with one other writer, and that is Flora Annie Steele. One has only to read Kim, then to go to the pages of "The Potter's Thumb," or her collection of short stories entitled "The Flower of Forgiveness" to find the resemblance. They both know the Punjab and love its race of

fine manly men. Mahbub Ali, the horse-trader and secret agent of the Intelligence Department, is a character which Kipling has drawn with a loving hand. We have also seen him before. He is drawn for us in verse in the volume of "Barrack room Ballads" as "Mahbub Ali, the muleteer" in the ballad of the "King's Jest." Kipling's children are always unnatural, because they are prodigies unusually smart and precocious, and "Kim" does not escape this suspicion. But despite this we are interested just as we were interested in the Machiavellian genius of the lads of "Stalky & Co." No one ever got the better of the trio in "Stalky & Co." "Kim" in his adventures and escapades always comes out on top, as the vulgar but expressive phrase goes. Years ago and, for aught we know, there still exists at Simla a reputed jeweller and curio merchant, who people said was the original of Marion Crawford's "Mr. Isaacs." He may be flattered to know that for the second time he has been selected to figure in the pages of romance. Those who are supposed to know say that it was this same jeweller at Simla who was the first mentor and guide chosen for Kim in his training for the Intelligence Department. The Lama one loves, if not with the great love bestowed on him by Kim, still one loves him to the very end, even when one feels that he is taking from the interest that has been aroused and held fast by the adventures to which Kim gives a divided allegiance by reason of his *chelaship*. I hold no brief for the Babu of Bengal, when I say that Kipling has always allowed his prejudice against Bengal and the Bengali to colour his descriptions of them. With every desire to make Hurry Chunder Mookerjee, another brilliant employee of the Intelligence Department, a successful and talented member of the service, he has only succeeded, in making him ridiculous. I have indicated, I think, the direction in which my preference for this story lies, and am, I believe, only echoing the sentiments of many when I say that a fuller insight in a sequel into the devious ways and strange by which the Intelligence Department of India works would be welcomed.

D. S. B.

VALMIKI AND SHELLEY.

It is long since that the East and the West met and shook hands with each other.

Acquaintanceship may now be said to have in a way reached the stage of interest. That this interest will develop into liking, and liking ripen into settled attachment, is what the saints wish and the sages predict as being in harmony with the spirit of that "far-off divine event, to which the whole creation moves." When, therefore, Providence seeks to join, let no man try to separate; what Providence will bring about in its own way and in the fulness of time, let no man hastily set about to give shape to. For the one is impious, the other fatuous.

Are there then signs to show that there is in the nature of things or conduct of parties that which makes for such a consummation? The signs, if any, seem only to point the other way. Take a common instance. "Better fifty years of Europe than a cycle of Cathay," sings a true son of the West, patting himself on the arm which has of late gained rather in size and strength. "It may safely be said that the literature now extant in the English language is of far greater value than all the literature which three hundred years ago was extant in all the languages of the world together," pouts another, pointing to his own head. And with hand upon his heart, and tears welling from his eyes, comes last, nay, in fact, first, the servant of God, exhorting the rest of the world to adopt, under penalty of eternal damnation, as its *sole* ideal that which he would have it fashion its life after, and to discard as valueless those in which it has for ages past lived, moved, and had its being. With what result? The East and the West are seen to stand with their hands locked each in the other's, but with their faces averted. Is not the West an adept at courting? Has it not made of courting too a 'science'? Why has it not 'woo'd' and

'won' its true mate, the East? Yes, the West is an adept in matters of physical courting; but in matters of spiritual courting, it is only a novice; and the ways of the one are not those of the other; that which is put on in the one case should be put off in the other.

To speak plainly, the triumphs achieved by the Occident in the material sphere have given to his views more or less a wrong centre. 'The locomotive, the steam-ship, the dynamo,' have made him slightly dizzy by imbuing him with a spirit of haste not quite compatible with calm thinking. 'The microscope, the telescope, the X-rays,' seem to have added but little to his clearness of vision. The mechanical turn of mind created and fostered by pursuits to which the said victories are owing, leads him oftener than may be desired, to exaggerate the capacity of his vocation, to explain events by its maxims, and, as it were, to refract through its medium, facts and phenomena not easily coming within its purview. His civilisation, aided and symbolised by the 'Nasmyth hammer' forged at the 'smithy of Vulcan,' is, in his opinion, justified in treating with scant courtesy the immortal gods wielding the sceptre of thought on 'Mount Olympus.' His sense of proportion and his genius for practicality are somewhat at fault. In the words of Lord Justice Bowen:—

"Intellectual modesty and reserve, the sense of proportion and wholesome mental habits of discrimination, all have yet to be acquired. The world seems to have so little power of discerning between the best and the second best. Sense and good taste are overlooked or slighted, and crowds hasten to worship the beauty of ugliness under the impression that it is art.....We pursue successful men and women to their down-sitting and up-rising, we enjoy the descriptions of their household furniture. Memorials are erected to every one who will only die in the odour of respectability. We write long biographies of Nobody, and we celebrate the centenary of Nothing."

"Intellectual modesty and reserve, the sense of proportion and wholesome mental habits of discrimination"—how are they to be "acquired"? Let us hear John Stuart Mill:—

Without knowing the language of a people, we never really know their thoughts, their feeling, and their type of character: and unless we do possess this knowledge of some people other than ourselves, we remain to the

hour of our death, with our intellects only half expanded We are not likely to correct any of our opinions or mend any of our ways unless we begin by conceiving that they are capable of amendment: but merely to know that foreigners think differently from ourselves, without understanding why they do so, or what they really do think, does but confirm us in our self-conceit, and connect our national vanity with the preservation of our own peculiarities. Improvement consists in bringing our opinions into nearer agreement with facts; and we shall not be likely to do this while we look at facts only through glasses coloured by those very opinions. But since we cannot divest ourselves of pre-conceived notions, there is no known means of eliminating their influence but by frequently using the differently coloured glasses of other people: and those of other nations, as the most different, are the best. . . . No nations of modern and civilised Europe are so unlike one another as the Greeks and Romans are unlike all of us; yet without being, as some remote orientals are, so totally dissimilar, that the labour of a life is required to enable us to understand them."

Taking the Englishman as typical of the "nations of modern and civilised Europe (and America)," and the Hindu as typical of "some remote orientals" "so totally dissimilar that the labour of a life is required" to enable the one to "understand" the other, is it not premature for the former to attempt to prescribe for the intellectual and spiritual needs of the latter before qualifying himself therefor? Is it too much to say that a man always *sympathises* to a certain extent with what he *understands*? Should not an Englishman *feel* with the Hindu before he can *think* for the Hindu? To "acquire," then, the qualities as pointed out by the Lord Justice, a course of life-long discipline and probation as recommended by the sage becomes necessary. Here it may be pertinent to inquire how the said means can produce such a result; how a knowledge of what the Hindu has thought and felt, together with why he has so thought and felt, supplies the Englishman the much needed corrective. As explained by Matthew Arnold, the Englishman is always bent on taking what is called a "practical view" of things. To his views cling "practical considerations," the question that ever rises to his lips being, "*Does it pay?*" He needs for the health of his mind the "Indian virtue of detachment." While the Englishman's mind is thus hampered and clogged, the Indian mind is able to maintain its "disin-

terestedness," is capable of viewing questions in the abstract, and is fitted to follow resolutely the law of its own nature, which is to be "a free play of the mind on all subjects which it touches." But it is the least part of the praise conferred on India to say that she is disinterested in her way of looking at things, and that this virtue of hers is to be adopted. In quality, in substance, also, her 'thoughts,' 'feelings,' and 'type of character,' have commanded the esteem of all right-thinking men. "Religion and philosophy have been the great contributions of India to the world," says Sir. W. W. Hunter. "True religion once came from the East, and from the East it shall come again," says Professor Tyndall, with gratitude on the one hand and a spirit of prophecy on the other. Leaving these, if we go to those who have been at pains to understand the Hindu by bestowing the labour of a life required, their opinion, the opinion of Monier Williams, Max Muller, and others, is matter of recorded history. They all speak as if they hold a brief for India. It would thus seem that, as regards the best that has been thought and felt, the Englishman has more to receive than to impart. As between him and the Hindu, each wishing to treat the other, the attempt of the latter would in a way seem to have a greater chance of meeting the needs of the patient than if, as is now the case, the former were to prescribe for those of the latter. But the Hindu, alive to the difference between advice that is thrust and advice that is sought for, is prone to be as jealous of his treasure as the Englishman is disposed to be prodigal of his. To this bounty of the Englishman, however, no less than to the exigencies of livelihood and other causes, the Hindu owes the privilege of understanding the Englishman through his own language, though not completely, yet to an extent by no means to be despised. While the Englishman, keeping himself in wilful ignorance of the divine 'language', 'thoughts', 'feelings', and 'type of character' of the Hindu, is at best 'a neophyte, enjoying the music and the incense

of the temple; but it is long before he is admitted to the arcana of the shrine.'

To the arcana, and to the arcana of the shrine, however, it is ordained that the Englishman is to be admitted, Nature's hierophants themselves leading. Of such hierophants Valmiki and Shelley may well be taken as typical. These two poets are poles apart in all that heredity and environment, the accident of time, place, and circumstance might well make them so. They are the representatives of two entirely different systems of civilisation, and of opposite worlds of energy; they may be taken as embodying in themselves, to an extent, all that in which the East and the West might be expected materially to differ. The externals connected with their lives need not detain us long; of the one, happily, we know too little; of the other, unfortunately, perhaps, too much. That Valmiki was, as the name implies, born of an ant-hill, meaning thereby probably that divine contemplation had made him so far dead to external world, that not even an ant-hill growing about his body could awaken him to consciousness of earthly life; that he was, as another of his names suggests, the son of Prachetas, the God Varuna, meaning what the fact might; that he is the first (dispute it as so-called critics might) and the best of Indian poets, as his *Ramayana* well proves; that the events he therein narrates relate to a time in which he himself lived; these are all, or very nearly all, the facts that could be gleaned about that rare immortal. In saying that 'Valmiki is the Homer of India,' perhaps more is conveyed than it might be otherwise possible to express. Coming as he does from India, pre-eminently the historic land whose history yet remains to be written, Valmiki has left it to the imagination of posterity to construct his image as best it might. Posterity has proved itself worthy of the trust, his name is associated with reverence, he is ranked among immortals. But Shelley, who hails from England, has his 'down-sitting and up-rising' chronicled:

is denied the right of intrinsic estimate as a poet, in the name of estimate which is admittedly 'not only personal, but personal with a passion'; is covered with opprobrious epithets, such as 'Iconoclast Shelley', 'Atheist Shelley', 'Mad Shelley'; is called upon to resign his 'civic crown' on the ground of 'unsubstantiality' of his poems; has his title to immortality rudely questioned. True, no doubt, that there are those at the other end who have sought to do justice not only to him but to themselves, by picturing to themselves and others Shelley as he really was or as they believed him to be, and have realised in him their 'King of beauty and fancy', 'Pythagorean', 'Angel of Charity', '*Cor Cordium*.' Shall we here press into service the 'doctrine of averages' to extract the real Shelley from such conflicting estimates? Putting aside, therefore, such vanities, let us turn to the works of Valmiki and Shelley, which alone are their esoteric biography; let us there study and try to understand their language, their thoughts, their feelings, and their type of character, and derive inspiration such as communion with lofty minds can alone give. The point of view that is here proposed to be taken of these two poets is one of approach as well as of divergence; approach, in the sense that extremes meet, or rather, that even if they do not meet, they are linked together; divergence, in the sense that 'man' and 'woman are 'man' and 'woman,' by reason of that which makes and keeps them so. The *Ramayana* of Valmiki, and the *Prometheus Unbound*, which is Shelley's masterpiece, are linked in thought. They are identical in their inner teaching. In conception and execution they suggest so close a parallel as to be indeed startling.* That the one is an epic and the other a lyrical and mythological drama; that the scope of the one, not only in extent, but in variety, is much wider; that the one reminds us of the calm breadth of the waters, and the other the force of the current; these and such as these are so many apparent differences, not concealing, but revealing, the

essential unity that underlies them. To carry home to some extent at least, though not fully (for that is impossible in a fugitive attempt like this) the lesson they are intended to teach, and to prevent the remarks from being very wide of the mark, a consideration of the subject according to some plan may be deemed desirable. The time-honoured Indian method may be adopted with advantage, and the subject may be considered under the following heads: (1) the Universal soul, the Ideal; (2) the individual soul, seeking union therewith; (3) the means for such union; (4) the end of such union; (5) the obstacles to such union.

प्राप्यसब्रह्मणोरूपं प्राप्तुश्च प्रत्यगात्मनः ।

प्राप्त्युपायफलप्रप्तिः तथाप्राप्तिविरोधि च ॥

वदन्ति सकला वेदाः सेतिहासपुराणकाः ।

मुनयश्च महात्मानो वेदवेदान्तपारगाः ॥

To consider the nature of these five topics has been the chief, if not the sole, object of all great systems of philosophy and religion; the results that some of them have arrived at being embodiments of the highest kind of truth which it is desirable for man to know. What the said systems present as bare abstract truth is, in the hands of poets like Valmiki and Shelley, made to assume concrete shape, is clothed in flesh and blood, endowed with life, invested with a grace and charm which hold reason and imagination captive. That the universe is pervaded, sustained, and controlled by one infinite, eternal Power; that the individual soul, an atom of the eternal, and as such finite, is by reason of its sins estranged, or kept estranged, from the said Power, being imprisoned in a material body liable to births and deaths; that the said soul, as if conscious of such separation, ardently longs for re-union; that the grace of the said Power is the sole means of effecting such union; that loving service and enjoying of the said Power is the end of such union; that lust and hate stand in the way of such union:—such in fact, is a bare outline of the lesson which these poets intend their works should convey,

and readers should profit by. And the way in which they fill in the said outline no less marks them out as artists of a very high order. As with Shelly, so with Valmiki, 'didactic poetry' is an 'abhorrence.' They do not formulate their teaching, but leave it to the intelligent and earnest seeker after truth to discover whatever lessons his faculties might enable him to perceive. To understand better what may in fact appear only as suggested, works other than the *Ramayana*, as also Shelley's works as a whole, will be incidentally referred to; and apology, if there be needed any, is here freely offered for the same. Now to the *Ramayana*. By Rama, Valmiki would have us understand the incarnation of the Universal Soul. Sita, the wife of Rama, is meant to typify the individual soul. The relation that ought to subsist between the individual soul and the Divine is shadowed forth by what Rama and Sita have, as typical husband and wife, exemplified in their conduct towards each other. To them is ascribed every noble and lovely attribute, physical, mental and moral, which it is desirable that man and woman should as such possess. They are described, so far as circumstances permit, as ideally perfect, each of their own sex. Their conduct is intended to serve as a model of what every husband and wife ought to be. Both spiritually and temporally the *Ramayana* possesses in the eyes of the Hindu an interest and value such as no other poem does. To him

✓ "Read Homer once, and you can read no more,
For all books else appear so mean, so poor,
Verse will seem prose; but still persist to read,
And Homer will be all the books you need."

has a far deeper and truer meaning when applied to his own poet of poets than was perhaps in the mind of the Englishman when he enjoined as above regarding the alien Greek. Without being guilty of exaggeration, we may safely say that the *Ramayana* has shaped and influenced in manifold and subtle ways the lives and conduct of many a man and woman during generations countless, and become not only the flesh of their flesh and bone of their

bone, but the thought of their thought and spirit of their spirit. A knowledge of lives among the best, delineated by a poet among the best, and *that* in a way among the best, cannot fail to be of service to mankind, independent of age, clime, or colour. The relation of husband and wife is but one among many, wherein Rama and Sita are intended to appear as our models, though it is the chief one to which we are limited by the plan of our present enquiry. Before becoming the husband of Sita, Rama had been born the eldest of the four sons of the valiant Emperor Dasaratha, and step-son to Empress Kaikeyi. How he behaved as a son, as a brother, as a king; what claims he regarded as primary and what secondary; how Sita, as wife of Rama, conducted herself in the correspondingly varied situations; how both reconciled the claims of conflicting relations upon their respective conduct; these are no less important, though more or less foreign to our present purpose. In consultation with, and in obedience to the wishes of, his subjects, Dasaratha arranges to instal Rama as Emperor in his own place, when Empress Kaikeyi befools her doting husband into banishing him for a period of fourteen years. The hour that is set apart as auspicious for the purpose of Rama's coronation sees his banishment. Sita is too faithful a wife, and Lakshmana too loving a brother, to consent to be left behind, and they accompany Rama into the forest, finding their own happiness in his. The carrying away of Sita by Ravana and locating her in his own capital, Lanka, is meant to represent the individual soul's estrangement from the Divine, and its tenantry a material body, as a consequence of its having come under the influence of sin. The wailings of Sita in exile are matched, and even surpassed by the laments of Rama, expressive of the fact that the Universal soul is more afflicted by the separation than the individual soul, and the Divine soul is more blessed in giving than the human soul is in asking or receiving. Hanuman,

the monkey-chief, who goes in search of Sita and carries message from Rama and back, and is the means of bringing about their union, stands for the mediator between God and man, the *Guru*, the spiritual teacher, the channel through which divine grace can flow, the wing wherewith human soul can fly to heaven. As it is not till Lanka is laid siege to and conquered, and Ravana killed, that Sita is recovered, so it is not till victory over the body is obtained by the complete killing of the passions that the individual soul can be reclaimed. When Sita is thus united with Rama, the Earth resumes her prime, and the golden age returns. Turn we now to Shelley. By Shelley Prometheus is represented as the incarnation of the genius of humanity, *i.e.*, the individual soul. Prometheus appears as chained and suffering under the tyranny of Jupiter who now rules over the world; a fact meaning that the human soul is imprisoned in a material body subject to births and deaths by way of penalty for having come under the dominion of lust and hate. The Supreme Soul, the Spirit of Divine Beauty and Love, the Ideal, after which the individual soul perpetually aspires, is typified in Asia, wife of Prometheus. And as if to complete the picture, Hercules is brought on the stage and made to unbind Prometheus, to remind us of the need for a mediator, in and through whom God and man are made one. The union of Prometheus with Asia marks the advent of the longed-for millennium. Valmiki and Shelley may thus be seen to be radically one in thought regarding problems of admittedly first-rate importance, the only difference between them being in the aspect each makes the Ideal to assume; the one loves to represent the Ideal as male, the other, as female. Descending a little into particulars, we find the same kinship continues. In language and in sentiment Shelley appears to be essentially Indian. From a child he lisps like a Hindu, he thinks the thoughts of the Hindu. His delicate and fine-strung emotional nature and his idealistic frame of mind give to his thoughts

and language a flavour such as the Indian mind highly likes. Of English, one of the most unmusical of languages, Shelley has tried (and what is more, succeeded in so doing) to evolve as much music as possible; few other poets remind us of the silver flow and sweet cadence of what the Hindu esteems as the language of the gods. The imagery adopted by Shelley bears the Indian stamp, and the Hindu mind delights to travel in its delicate mazes, in which the Western mind is apt to lose itself. While others illustrate the abstract, by means of the concrete, Shelley, like Valmiki and other Indian poets, very often illustrates the concrete by means of the abstract. By his abstemiousness and vegetarianism he is knit closer to the Hindu. His ardent faith in immortality and in the infinite perfectibility of mankind affords additional bonds of affinity with the Hindu. Above all, his highly rarefied spiritual nature which makes him view everything as the symbol and abode of God, his pure Vedantism, entitle him to access to the Hindu pantheon without probation. Shelley styles God variously: 'Spirit of Nature,' 'Spirit of Beauty,' 'Life of Life,' 'Nature's Soul,' 'Soul of the Universe,' &c.; though the words 'God' and 'Creator' are also freely used:—

(i) Thou art as God whom thou contemplatest.

—*Hellas.*

(ii) *Vide Shelley's Sonnet to Byron.*

Shelley believed God to be Almighty:

Thou art the judge beneath whose nod
Man's brief and frail authority
Is powerless as the wind
That passeth idly by.—*Queen Mab.*

All Pervading:

And the unbounded frame, which thou pervadest.
—*Queen Mab.*

All-merciful: for Shelley characterises God as 'that Power'

Which wields the world with never-weary love,
Sustains it from beneath, and kindles it above.

Adonais.

and adds:

The Fathomless has care for meaner things
Than thou canst dream.—*Hellas.*

If thou hopest

[Mercy in heaven, show justice upon earth.

—*The Cenci.*

He believed "that Power" to be also Unchanging, Eternal, One:

But look on that which cannot change—the One,
The unborn and the undying.—*Hellas.*

The One remains, the many change and pass;
Heaven's light for ever shines, earth's shadows fly.
—*Adonais.*

The human soul is, according to Shelley, "a portion" or "an atom" of the "Eternal," "the burning fountain whence it came," and to which it "shall flow back" in course of time. (*Ide Epipsychidion*, and *Adonais*, xxxviii).

Its finite character is thus expressed:

O thou quick heart, which pantest to possess
All that anticipation feigneth fair,—
Thou vainly curious mind which wouldst guess
Whence thou didst come and whither thou mayst go,
And that which never yet was known wouldst know,
—*Sonnet.*

The Supreme Soul is partly visible and partly invisible to the finite soul:

Child of light! thy lips are burning
Through the { vest which } seems to hide them.
 { veil that }

—*Prometheus Unbound.*

सत्त्वं न चेत् धातरिदं निजं बभूवुः ।

विज्ञानमज्ञानमिदापमार्जनम् ॥

गुणप्रकाशैरनुमीयते भवान् ।

प्रकाशतयस्य हियेन वा गुणाः ॥

{ Bhagavata,
Bk. X, ii, 37

["Lord! had this thy own all-pure form not been, Gloom-driving ken would swept away have been; Thy Attributes becoming manifest, Thou'rt known; And, through thy Form, thy Attributes have ever shewn."]]

Man's conception of God, therefore, says Shelley, is relative, i.e., determined by the nature of his faculties, and not answering to God as he really is; in other words, anthropomorphic:

Heaven! for thou art the abode
Of that power which is the glass
Wherein man his nature sees.—*Ode to Heaven.*

By reason of its sins the finite soul is estranged from the Infinite, and confined in a material body:

And now, alas! the poor sprite is
Imprisoned for some fault of his
In a body like a grave—*Ariel to Miranda.*

The finite soul wishes to partake of the nature of the infinite:

I love all waste
And solitary places; where we taste
The pleasure of believing what we see
Is boundless, as we wish our souls to be.
— Julian and Maddalo.

It ardently longs to become one with the Divine :
(i) I am not thine; I am a part of thee. } *Epipsychidion*,
(ii) Conscious, inseparable, one. }
(iii) Love's Philosophy.
(iv) Till I mingle into thee—*Fragment*
(v) The mind becomes that which it contemplates.
—*Prince Athanese*.

cf: मोक्षसाक्षिकयसारूप्यप्रार्थयेनकदाचन ।
इच्छाम्यहं महाबाहोसायुज्यंतवमुन्नत ॥
जितंतास्तोत्र.

[O Thou great and virtuous Lord! Never for salvation, nor for Thy presence, nor to be like unto Thee, do I pray; but to be made one with Thee is what I earnestly desire.]

The Supreme Soul feels for the individual not less keenly:

That soul by which I live,
Asia's words, *Prometheus Unbound*.

cf: (i) ज्ञानित्वात्मैवमेतत्.

Krishna's words, *Gita*,
[I consider the knower to be my very soul.]

(ii) ममप्राणाहिषाण्डवाः.

Krishna's words, *Mahabharata*,
[The Pandavas are indeed my very life]

(iii) चिरंजीवतिथैर्देहीयदिमासंघरिष्यति ।

नजीवेयं क्षणमपि विनातामसितेक्षणा ॥

Ramayana,
[Long indeed does Sita live if she can sustain for a month; but not even a trice can I live without my dark-eyed one.]

That not even man's sins and his persistence therein are considered by God to be ground enough to alienate him from His love, is thus expressed by Shelley:

That light whose smile kindles the Universe,
That Beauty in which all things work and move,
That Benediction which the eclipsing Curse
Of birth can quench not, that sustaining Love
Which through the web of being blindly weaves
By man and beast and earth and air and sea;
now beams on me.
Adonais.

It is not what man can do, but what God Himself does through grace, that can put an end to the 'curse of birth'; all that is needed on man's part being hope, and resignation:

Resist not the weakness,
Such strength is in meekness
That the Eternal, the Immortal,
Must unloose through life's portal,
The snake-like doom coiled underneath his throne
By that alone.—*Prometheus Unbound*.

To work out our sins, more births than one are needed. The last two extracts make this in a way clear. Yet the following may not be out of place:

(i) 'Many an antenatal tomb.'—*The Sensitive Plant*.
(ii) 'Memories of an antenatal life'—*Prince Athanese*.
(iii) 'Wantons in endless being.'—*Queen Mab*.
(iv) 'Before thy memory,
I feared, loved, hated, suffered, did and died.'
—*The triumph of Life*.

Shelley therefore thought of 'life' and 'death' in their true philosophic aspect:

(i) Death is the veil which those who live call life:
They sleep, and it is lifted.—*Prometheus Unbound*.
(ii) Life, like a dome of many colored glass,
Stains the white radiance of Eternity,
Until Death tramples it into fragments,—Die,
If thou wouldst be with that which thou dost seek.
—*Adonais*

cf: (i) मरणप्रकृतिः शरीरिणा

विकृतिः जीवितमुच्यते बुधैः ।

—*Kalidasa*.

[By the wise, death is spoken of as the natural condition of beings, and life a deviation therefrom.]—

(ii) कृतकृत्याः प्रतीक्षन्ते मृत्युप्रियमिवातिथिम् ।

—*Valmiki*.

[Those who have done their duty eagerly expect to meet death as they would do a welcome guest.]

As compared with the Supreme Soul the individual was regarded by Shelley to be no better than a 'worm':

'So I, a thing whom moralists call worm'

—*Letter to Maria Gisborne*.

The attitude of this 'worm' with regard to the Supreme Soul, and the spirit in which it should approach the Divine, is expressed by Shelley in such unmistakable language as the following: 'worship,' 'homage,' 'adore,' &c.

The spirit of the worm beneath the sod
In love and worship, blends itself with God.
—*Epipsychidion*.

cf: भक्त्या त्वनन्यया शक्यं ब्रह्मेव विधोऽर्जुन ।

ज्ञातुं ब्रह्म च तत्त्वेन प्रवेष्टुं च परं तप ॥

Gita, XI, 54.

[O valiant Arjuna! By single-minded devotion alone can I—such as you have now seen me to be—be known, seen, and penetrated, in my true essence.]

To the highest state of bliss, there is but one road :

There is one road
To peace, and that is truth.
Julian and Maddalo.

(ii) Vice
Is discord, war and misery ;.....virtue
Is peace, and happiness, and harmony.
—*Queen Mab.*

To love, to worship, to follow truth, to be virtuous, man has but to will ; not till he tries can man know what power for good there is in will, how valuable a possession is a thoroughly cultivated will :

' the happy age
When truth and love shall dwell below
Among the works and ways of men ;
Which on this world not power but will
Even now is wanting to fulfil.'
—*Rosalind and Helen.* 'We know

That we have power over ourselves to do
And suffer—*what*, we know not till we try ;
But something nobler than to live and die.'
—*Julian and Maddalo.*

cf: सत्येनलोकान् जयतिदीनान् दानेनराघवः ।

गुरुन् शुश्रूषयावरिषन्नुषायुधिशास्त्रवान् ॥

Ramayana.
[Rama conquers the people by means of truth, the poor by gifts, the elders by service, and the foes in battle by arms.]

As regards aiming high and aiming low :

One aspires to Heaven,
Pants for its sempiternal heritage ;
And ever-changing, ever-rising still,
Wantons in endless being,
The other, for a time the unwilling sport
Of circumstance and passion, struggles on ;
Fleets through its sad duration rapidly ;
Then like an useless and worn-out machine,
Rots, perishes, and passes.—*Queen Mab.*

cf: एकः पालयतेलोकं

एकः पालयतेकुलं ।

ममत्येकोहिनीरये

एकः स्वर्गेमहीयते ॥

Ramayana.
[One man saves the world, another the race ; the third in hell sinks, and the fourth glories in Heaven.]

The happiness of having led a virtuous life is thus described :

' that ecstatic and exulting throb
Which virtue's votary feels when he sums up
The thoughts and actions of a well-spent day.'
—*Queen Mab.*

What then is the "meed of virtue" ?

Shelley replies:—(*Vide Queen Mab*).

To "know how soonest to accomplish the great end for which it (the spirit) hath its being," and to taste that peace which in the end, all life will share. This is the meed of virtue."

Here the Indian regards Shelley as again referring to transmigration of souls, as also to universal redemption.

Lest he should be considered to have made too much of the power of human will, Shelley takes care to say that man is free not even to will, that man's very will is, like the rest of the universe, pervaded, sustained, and controlled by God :

Man, like these passive things,
Thy will unconsciously fulfillet.—*Queen Mab.*

cf: कर्तुनेच्छसियन्मोहात् करिष्यस्यशोषितम् ।

—*Krishna's words to Arjuna. Gita.*

[Unconsciously at least you will do that which in your ignorance you do not like to do.]

It therefore entirely rests with God to inspire the individual soul with love and worship, to teach it His own will, to sustain it in its endeavours after righteousness. The means mediate as well as immediate have for their end the blending of all souls with God, so as to be

' a nation
Made free by love ; a mighty brotherhood
Linked by a jealous interchange of good.'
—*Revolt of Islam.*

cf: "प्रीतिकारितकैकये अहमहमिका."

[Vying with one another in loving service.]

What prevents the individual soul from realising such bliss is its sinfulness, lust, hate, revenge. Of the folly of returning evil for evil, Shelley says :

'Some perverted beings think to find
In scorn or hate a medicine for the mind
Which scorn or hate hath wounded. O, how vain !
The dagger heals not, but may rend again.'
Julian and Maddalo.

'Love, and not revenge, and terror and despoise' is the panacea Shelley prescribes for the ills that flesh is heir to. To 'love' Shelley appropriates all that which can make this earth a 'reality of Heaven.'

(i) And love and joy can make the fondest breast
A paradise of flowers where peace might build
her nest.
Revolt of Islam.

- (ii) All love is sweet.
Given or returned
- (iii) *Asia's speech : Prometheus Unbound.*
Let love shed on the bosom a tear,
And dissolve the chill ice-drop of woe.
- (iv) It is a sweet thing, friendship, a dear balm,
etc., etc., etc.,
Fragment.

And when love reigns supreme,
The lion now forgets to thirst for blood

the cup of joy
Courts the thirsty lips it fled before.
—Queen Mab.

In all the above the Indian looks upon Shelley as speaking the thoughts of the Hindu in the language of the Hindu, for they are all the Hindu's stock sentiments. But the kinship lies still deeper. Shelley, in the course of his works refers more than once to men and events of old with a feeling akin to that he cherished towards the Divine. To the Greeks, to Socrates, Plato, Homer, and others, no less than to the other blessings conferred by Greece on humanity, his attitude is one of 'knee-worship.' "If I am too jealous," says Shelley in one of his letters to his friend, Peacock,—"If I am too jealous of the honour of the Greeks, our masters and creators, the Gods whom we should worship,—pardon me." "Kings of thought"; "Kings of old philosophy"; "Kings of melody";—such was Shelley's veneration for the Greek "sage" and "poet" whom he acknowledges to have been the fountain of his own inspiration (*Revolt of Islam*. II. XX.). Although the language as here used by Shelley expressly refers to those named, it seems not unlikely that its scope was intended to be much wider. The curious student will discover that Shelley's works contain no fewer than sixteen references to something or other connected with India. That India loomed large in his vision, that it had some share in determining the tone and colour of his thoughts, those references evidence. Had he been but better acquainted with India, as it seems he in his heart of hearts longed to be, his apotheosis of the Hindu sage and poet of Valmiki's stamp would have in all probability been

complete. Æschylus, the Greek poet, is Shelley's prototype, and the *Prometheus Unbound* is Greek in name and source. But a reference to Shelley's preface to the said poem makes it clear that his indebtedness to the Greek author does not extend so far as to mar the originality of the adaptation, and the deviations are all improvements upon the original, tending to give a heightened and sustained moral interest such as is found in the *Ramayana*. Although there is not much in a name, yet to represent the ideal by the name of *Asia* strikes one as rather strange. The meaning, if there be any, the speculative mind should be able to discover. Whether Shelley or Æschylus is held responsible for the choice of the name and the mode of representation, the fact remains the same, independent of the all but proven question that almost all Greek names and ideas have an Indian origin. The birth of *Asia* from the sea finds its parallel in the birth of *Lakshmi* (चिरसागरकन्यका) from the milk-sea. The name *Prometheus* is not without interest. It means 'forethought,' connected as it is with the Sanskrit root प्र, before, मेधा, intellect, thought.

Prachetas also means 'forethought' (प्र and चेतस्, mind), and is, as already mentioned, the name of him whose son *Valmiki* is. Can we therefore connect *Prometheus Unbound* with *Valmiki* and his *Ramayana*? Again, are the *three thousand years* mentioned by *Prometheus* in the opening speech of the drama in any way an approximate estimate of the interval between the appearance of *Valmiki* and *Æschylus*? Taking the age of the *Mahabharata* as fixed at about 1500 B. C., to be correct, and the reference therein to *Rama* (III, 15872-16602; *Gita*, X, 31) and to his father-in-law, *Janaka* (*Gita*, III, 20), to be authentic, are we safe in assigning to *Valmiki* precedence by about as many years as *Prometheus* himself mentions? To take the name of *Shelley*, but not in vain. Has it, like almost all Eastern names, a meaning? What meaning, if any, would

Shelley himself have liked his name to bear as being in any way characteristic of himself? In his *Revolt of Islam*, II, XXI, we find

"The boat was one curved shell of hollow pearl
Almost translucent with the light divine
Of her within."

cf: वसतिहृदिसनाहने च तस्मिन्
भवतिपुमान् जगतोऽस्यसौम्यरूपः ।
चितिरसमतिरम्यमात्मनान्तः
कथयतिचास्तयैवसालयोतः ॥

Vishnu-Purana, III, vii, 24.

["While in the heart, The First of Beings dwells,
Man looks, meek lovely faced, on all things else :
Does not the young sal,* by its very glow,
Its secret drink at sweetest ground-spring, show?"

In *Prometheus Unbound*, Act II, Sc., iii, there occurs * * * *

one Looks it not like lulled music sleeping there !
Spirit. It seems in truth the fairest shell of Ocean :
Its sound must be at once both sweet and strange."

cf: शंखाद्वीणानिनादोयमुदेतिमहद्भुतं ।

Chandraloka.

[Passing strange it is that the conch emits the music of the Vina.]

And in *Charles the First*, we have

"Like curved shells dyed by the azure depths
Of Indian seas."

Surely comment on the above passages is superfluous. Shelley could have been plainer only by being coarse. The sage was ever the admiration of Shelley. Contrasting his own life with that of the sage, he exclaims :

"Alas ! I have nor hope nor health,
Nor peace within nor calm around,
Nor that content surpassing wealth
The sage in meditation found,
And walked with inward glory crowned—"

Stanzas.

He then continues :

"But from his eye looks forth
A life of unconsumed thought which pierces
The present and the past, and the to-come."

—*Hellas.*

cf: भगवान्. [He who knows the past, the present, and the future.]

* "The vigorous tree of *Ramayana* fame, which European botanists call—*Shorea robusta*."

And with bated breath thus concludes :

The sage, in truth, by dreadful abstinence,
And conquering penance of the glutinous flesh,
Deep contemplation and unwearied study,
In years outstretched beyond the date of man,
May have attained to sovereignty and science
Over those strong and secret things and thoughts
Which others fear and know not.—*Hellas.*

If the above words make it clear that Shelley, when he used them, had in his mind a sage of the type of *Valmiki*, he does not leave us in doubt as regards his attitude towards him :

Still they were friends, as few have ever been
Who mark the extremes of life's discordant span.

—*Prince Athanese.*

And what is it that we are reminded of when we read the following passage in *Rosalind and Helen*.

Now drain the cup.....
Which the poet-bird has crowned so well,
With the wine of her bright and liquid song !
Hear'st thou not sweet words among
That heaven—resounding minstrelsy ?
Hear'st thou not, that those who die
Awake in a world of ecstasy ?

Does not the above appear to be more or less a paraphrase of those devotional verses in Sanskrit which are chanted by every Hindu before the reading of the *Ramayana* is commenced ?

(i) कूजन्तं रामरामेति

मधुरंमधुराक्षरं ।

आरुह्यकविताशाखां

वन्देवाल्मीकिंकोकिलं ॥

(ii) यःकूर्णोजलिसंपुदैरहरहस्सम्यक्विपवत्यादरात्

वाल्मीकेर्वदनारविन्दगलितंरामायणाख्यमधु ।

जन्मव्याधिजराविषीतमगौरत्यन्तसोपद्रवं

संसारंसविहायगच्छतिपुमायविष्णोःपदंशाश्रितं ॥

Preceptor and disciple, *guru* and *sisya*, is not an unseemly relation in which *Valmiki* and Shelley might be brought together, though it is possible that the latter would have bettered the instruction. We have Shelley's own warrant for it.

"the youth

soon outran
His teacher, and did teach with native skill
Strange truths and new to that experienced man."

—*Prince Athanese.*

It is to Shelley's credit that he has made the

evil principle, as typified in Jupiter, derive its power from Prometheus who consents to suffer:

Pro. I gave all
He has : and in return he chains me here
Years, ages, night and day

Valmiki also makes Ravana trace his strength (through Brahma) to the Being whom he seeks to oppress. And the fate of Jupiter and Ravana has thus its own significance. Shelley depicts one of the noblest of human traits when he makes Prometheus, in the agony of his torture, revoke his curse on Jupiter, the author of his misery. This is in keeping with what is done by Valmiki, who makes Rama and Sita display the same spirit of forgiveness :

- (i) मातरं चैकेयीं भारोषंकुरुतां प्रति ।

Rama's words to Bharata.

[Protect mother Kaikeyi ; be not angry with her.]

- (ii) आनयै नहरि श्रेष्ठदत्तमस्याभयं मया ।

विभीषणोवासुग्रीवयादिवारावणस्त्वयं ॥

[Bring him in, O Sugriva, King of monkeys! Accord-
ed by me to him is the assurance of safety, be he
Vibhishana or even Ravana himself.]

- (iii) कुरुप्रसादंधर्मज्ञ ॥

सप्तत्वांत्वांत्यजामीतियदुक्तैककयीत्वया ।

सशापःकैकर्याघोरस्सपुत्रानंसृशेत्प्रभो ॥

Rama's appeal to Dasaratha on behalf of Kaikeyi during his interview with him in heaven.

[Virtuous sire! Grant that the dread curse you pronounced on Kaikeyi, saying that you would abandon her with her son, may not come near her.]

- (iv) पापानां वा श्रभानां वा वधार्हाणां प्लवंगम ।

कार्यकरुणमार्येणनकश्चिन्नापराध्यति ॥

Sita's pleading on behalf of her oppressors.

[O chief of monkeys! To the virtuous and to the vicious, to those deserving death itself, mercy ought to be shown by my noble Lord, for there is none but is liable to err.]

Too many indeed are the parallelisms in thought to bring within compass which has been already exceeded. Shelley's *Fragments from an unfinished drama* gives the picture of an ideal Hindu wife, the spirit by which she is actuated being thus represented:

He was so awful
More need was there I should be innocent.

He fled and I have followed him.

- ८१: यद्यप्येषभवेत् भर्ताममार्थवृत्तवर्जितः ।

अद्वैधमुपचर्तव्यः तथाप्येषमयाभवेत् ॥

Sita's Words to Anasuya.

[Even if my lord should grow unrighteous, it would still be my duty to serve him with single-minded devotion.]

Revered lady !

Shelley's *Hymn to Mercury* reminds us of the juvenile pranks of Krishna. His *Hymn of Apollo* contains language fit to take rank with that in the *Gita*.

Next as regards Shelley's Idealism. The following is typical :

Earth and Ocean,

this whole

Of suns and worlds and men and beasts and flowers
With all the silent or tempestuous workings
By which they have been, are, or cease to be,
Is but a vision;
Thought is its cradle and its grave; ...
... .. they have no being;
Nought is but that which feels itself to be.—*Hellas*

The above seems to be an excerpt from the works of Sri Sankara himself. Shelley's *Epipsychidion* is above all praise we can bestow. One feels one's breath almost taken away as one reads it. It is a performance about which it is enough to say that *Jagannatha Pandit*, author of *Ganga-lahari*, *Jaya-deva*, author of *Song of Songs*, *Sri Sankara*, author of *Soundarya-lahari*, *Muka*, author of *Panchasati* or *Kalidasa*, author of *Syamla-dandaka*, would have felt it no mean honour to own the production theirs. As regards imagery, the illustration of the concrete by means of the abstract can alone be here briefly touched upon :

- (i) Its sails are folded like thoughts in a dream.

—*The Boat on the Serchio.*

- (ii) Thou dost float and run ;

Like an { unbodied } joy whose race is just begun.
 { embodied }

—*To a Skylark.*

- (iii) Hark ! the rushing snow !

The sun-awakened avalanche ! whose mass
Thrice sifted by the storm, had gathered there
Flake after flake, in heaven-defying minds

As thought by thought is piled, till some great truth
Is loosened, and the nations echo round
Shaken to their roots, as do the mountains now.

Pro. Unbound.

cf: (i) रमणीयप्रसन्नांबुसन्मनुष्यमनोयया ।

Valmiki.

[Pure and pleasant is the water, like the mind of the good.]

(ii) मूर्तोविघ्नस्तपस इव...धर्मारण्यं व्रजति . गज. ।

—Kalidasa.

[Like an embodied obstacle to penance does the elephant enter the peaceful groves.]

To represent the lower order of creation including inanimate nature as sympathising with man in his misery, is also a practice to which Shelley resorts in common with Indian poets :

(i) What! can the everlasting elements
Feel with a worm like man?—*The Cenci*

(ii) The cold day
Trembled for pity of my strife and pain.

Epipsychidion.

cf: (i) विषयेतमहाराजरामव्यसनकशिताः ।

अपिवृक्षाःपरिम्लानास्तपुषांकुरकोरकाः ॥

Valmiki.

[Afflicted by Rama's sorrow, O King!, the country, nay the very trees have begun to fade with all their tender leaves and buds and blossoms.]

(ii) अप्रमादोदित्यपिदलतिवज्रस्यहृदयं ।

—Jhacabhuti.

[Even the rocks do weep, even the heart
Of the adamant is split in twain.]

What place India had in the mind and heart of Shelley none can positively say. Yet judging from the way in which he makes mention of India in *Alastor* and *Prometheus Unbound*, and knowing that he identifies himself with the heroes of those poems, Alastor and Prometheus, we are not altogether without warrant for supposing that to India also he looked for the satisfaction of his deeper spiritual longings, and not altogether in vain. The journey of Alastor as far as the 'Indus' and the 'vale of Cachmire' 'in search of the thrilling secrets of the birth of time,' and the vision there seen by him; the association of the name of Prometheus with the 'cave' 'beside that temple' 'beyond Indus and its tribute rivers with the Earth's following comment:—

"It is deserted now, but once it bore
Thy name, Prometheus; there the emulous youths

Bore to thy honour through the divine gloom
The lamp which was thine emblem; even as those
Who bear the untransmitted torch of hope
Into the grave across the night of life,
As thou hast borne it most triumphantly
To this far goal of Time. Depart, farewell.
Beside that temple is the destined cave."

If these have a meaning, as it is believed they have, the 'Celt' and the 'Indian,' who 'knew' each other long ago, might now at least consider it high time that they should prepare themselves to walk hand in hand to the 'temple', where, under the auspices of Nature's high-priests like Valmiki and Shelley, the most desired event is to be consummated. Valmiki and Shelley have, in fact, met, and their message is one and the same. How they have met need not occupy us here. So much for the point of view of approach. Next as to the point of view of divergence. The East and the West are, as already mentioned, polar, in more ways than one. Speaking generally, the West relies on facts, while the East takes refuge in ideas. The West is objective, active; the East, subjective, passive. Of the two tendencies of the human mind, the analytic and the synthetic, the West and the East may be taken to be respectively typical. The achievements of the understanding, reason, science, are the delight and glory of the West; whereas victories in the domain of feelings, imagination, poetry, are the cherished possessions of the East. The West is more or less logical; the East more or less ethical. The intellectual and emotional sides of human nature find in the West and the East their respective embodiments. What the emotional nature perceives intuitively, the intellectual sees after a time, and when pointed out. That all thought begins in feeling; that the intellect is sustained by an under-current of emotions; that the heart may give useful lessons to the head; are all so many ways of expressing the ministry of feeling in the economy of the universe. Of the service of the understanding, more need not be said when it is borne in mind that the worst of madmen is a saint run mad. Neither in the

intellectual, nor in the emotional, alone is human nature complete. Each is needed by the other. What the one lacks the other supplies. The two together form one. And the West and the East differ in the very things in which male does from female, man from woman, husband from wife. It seems, therefore, not unreasonable to expect the West to 'cleave' unto the East, so that the two together might form 'one flesh.' Who knows but that the commingling of the two in the right spirit and at the right hour is the one thing needed to make this blighted land of ours 'a land flowing with milk and honey?' Further, the East and the West furnish the key to their real nature by their mode of conceiving the ideal. As each is attracted by and to that which by nature is its opposite, the energetic masculine nature of the West loves to picture the ideal as female, while conceiving the same as male harmonises best with the feminine instinct of the East. Not therefore by transforming or transmuting the one into the other is the earth to be regenerated, but by developing to the uttermost that which each has, so as to supply in full what the other has not, by creating in them a sense of the need of each by the other, by promoting union between them in the real sense of the term, by infusing into each the spirit of 'bear and forbear', is the advent of millennium on earth to be hastened. When the East and the West are thus united in happy wedlock, Rama and Sita, Asia and Prometheus, are again made one. And one word more before concluding. There is, however, an aspect of Shelley not to be lost sight of. He was essentially a creature of his age. He received from the age no less than he imparted to it. The air was full of the cry of the great French Revolution. He imbibed much of its spirit, and adopted its watch-words as the watch-words of progress, peace and good-will among mankind. The ebullitions of rebellious spirit, which are to be seen in his writings, political, social, and theological, are so many indications of a highly sensitive nature, impelled,

as he himself says, by 'a passion for reforming the world, and wound to a very high pitch. And they had no time to cool. Yet Shelley must be allowed the right of defence. "The erroneous and degrading idea which men have conceived of a Supreme Being, for instance, is spoken against, but not the Supreme Being itself." "But whilst the sceptic destroys gross superstitions, let him spare to deface the eternal truths charactered upon the imaginations of men." These words of his ought certainly to go a long way in disarming ignorant and unsympathetic criticism. That the world is better for his having lived cannot be denied. He deserves to be classed among "Immortals," who bring themselves down to our level, gently take us by the hand, endow us with their vision, make us taste sweets we should not otherwise dream of. Whether we wish to soar high into the empyrean of thought, or dive deep into the mystery of things, they alone are our best guides. To evils such as a mechanical age breeds, cures such as poet-philosophers offer are alone the most efficacious. Now, therefore, more than ever, does the West need to come under the spirit of their teaching. Not unless and until it so comes can it, lost in details as it is, rise from the concrete to the abstract, see the general in the particular, embrace the one in the many.

Faults of every kind and degree no doubt teem in an attempt which has enthusiasm more than industry to commend it. But the consciousness is not without a hope that the said faults will prove excellences in abler and worthier hands. Before concluding, however, gratitude bids the laying of a flower at the altar of those two piqué souls—the representatives of the nationality our two poets adorn—still working in our midst, and wearing themselves thin and to the bone for our sole benefit, at whose divine flame was caught the spark, of which is but a feeble glowing, *Valmiki and Shelley*.

The World of Books.

THE GARDEN OF KAMA and other Love Lyrics from India. Arranged in verse by Laurence Hope. London, William Heinemann.

"Laurence Hope," it would appear, is a pseudonym and the real author is an English lady, the wife of a civilian in Northern India. We congratulate the authoress on the delightful volume of verses which she has presented to the public. The poems bespeak a bright future for the writer and every one will be struck with the writer's strong imagination, flow of diction, and an appreciation of oriental life and thought which few writers on Indian subjects display.

The book is not devoted to a description of the beauties and happiness of love alone. There are also descriptions of tales of intense pathos, of stories of lust and vengeance and hatred, and also of tragic incidents of everyday life that occur on the Border and in the Bazaar. They are all of them true to life and nature. Read for instance "Valgovind's Song in the Spring" and you get an idea of the authoress' poetic vigour and imagination.

The Temple bells are ringing,
The young green corn is springing,
And the marriage month is drawing very near.
I lie hidden in the grass,
And I count the moments pass,
For the month of marriages is drawing near.
Soon, ah, soon, the women spread
The appointed bridal bed
With hibiscus buds and crimson marriage flowers,
Where, when all the songs are done,
And the dear dark night begun,
I shall hold her in my happy arms for hours.
She is young and very sweet,
From the silver on her feet
To the silver and the flowers in her hair
And her beauty makes me swoon,
As the Moghla trees at noon
Intoxicate the hot and quivering air
Ah, I would the hours were fleet
As her silver circled feet.

I am weary of the daytime and the night
I am weary unto death,
Oh my rose with jasmine breath,

With this longing for your beauty and your light

As a contrast to this, read the last verse in the "Reminiscence of Mahmad Akram."

I cannot forget—

I cannot escape. What are the stars to me?
Stars that meant so much, too much, in my youth
Stars that sparkled about your eyes,
Made a radiance round your hair,

What are they now?
Lingering lights of a Finished Feast,
Little lingering sparks rather,
Of a Light that is long gone out.

THE DISCOVERY OF THE FUTURE by H. G. Wells. (London, T. Fisher Unwin.)

This is a re-print of an address by the celebrated author of "Anticipations" delivered to the Royal Institution in January last and deals from the standpoint of modern science with the question as to the possibility of a systematic exploration and an inductive knowledge of things in the future. The earlier part of the discourse is devoted to a discussion of the two divergent types of mind, distinguished chiefly by their attitude towards time and by the relative importance they attach and the relative amount of thought they give to the future of things. The first of these two types is retrospective in habit and interprets the things of the present entirely in relation to the past. It is the legal or submissive type of mind constantly referring to the law made, the right established, the precedent set and consistently ignoring or condemning the thing that is only seeking to establish itself. The second type of mind is constructive in habit and thinks constantly, and by preference of things to come and of present things mainly in relation to the results that must arise from them. It is the legislative, creative or organising type, perpetually attacking and altering the established order of things and perpetually falling away from respect for what the past has given us. Our views on the affairs of life vitally differ according as we adopt one or the other of these modes of looking at things. These two methods are ever in conflict and work out into divergent and incompatible consequences. Mr. Wells points out that of late there has been a discovery of the future, an increasing disposition to shift the reference and values from things accomplished to things to come, due mostly to the assimilation of the broad conceptions of science. The development of this new spirit and its application to the problems of life would widen the bounds of our attainable knowledge of the future and invest the phenomena of the present with a new meaning and value. The deliberate direction of historical study, and of economic and social study towards the future and a courageous reference to future in moral and religious discussion would be enormously stimulating and profitable to our intellectual life. Mr. Wells has tried the new method of study himself and given us the result thereof in his "Anticipations," in which he makes a number of prophecies as to the faith, morals and public policy of the world at the end of the twentieth century. We have no doubt that this suggestive and pregnant address will open the minds of its readers to a new range of ideas and a new standard of criticism.

SELECTIONS FROM THE WRITINGS OF JAMES ANTHONY FROUDE. *Longmans Green & Co., London and Bombay.*

This is a special Indian edition with notes by Mr. P. S. Allen, M. A., late Professor of History, Government College, Lahore. It seems to have been specially designed that this volume should serve as an English Text book for Indian colleges. Indian students have thus an opportunity of acquainting themselves with the writings of Froude. The selections are classified under historical scenes, historical portraits, historical sketches and a few other miscellaneous selections. The pieces relating to the 'problem of life' and 'self-sacrifice' convey to the reader an idea of the ethical influence of Froude as a writer. 'National independence' which is the last of the selections in this volume may be read with particular interest at this moment when prominent Liberals like Lord Rosebery declare that "Home Rule" should be thrown out of the Liberal programme. According to Froude Ireland has been the maker of her own woes, her chiefs and leaders had no real patriotism. In Scotland, though the nobles might quarrel among themselves, they buried their feuds and stood side by side, when there was danger from the hereditary foe. There was never a time, when there was not an abundance of Irish, who would make common cause with the English, when there was a chance of revenge upon a domestic enemy or a chance merely of spoil to be distributed. All alike though they would make no stand for liberty, as little could indure order or settled government. Their insurrections which might have deserved sympathy, had they been honorable efforts to shake off an alien yoke were disfigured with crimes which, on one memorable occasion at least, brought shame on their cause and name. When insurrection finally failed, they betook themselves to assassination and secret tribunals, and all this, while they were holding up themselves and their wrongs as if they were the victims of the most abominable tyranny, and inviting the world to judge between them and their oppressors.

Nations, Mr. Froude then goes on to say, are not permitted to achieve independence on these forms. Unhappily, though unable to shake off the authority of England, they were able to irritate her into severities which gave their accusations some show of colour. Everything which she most valued for herself—her laws and liberties, her orderly and settled government, the most ample security for person and property—England's first desire was to give to Ireland in fullest measure. The temper in which she was met exasperated her into harsh-

ness and at times to cruelty and so followed in succession, alterations of revolt and punishment, severity provoked by rebellion, and breeding in turn fresh cause for mutiny, till it seemed at last as if no solution of the problem was possible save the expulsion or destruction of a race which appeared incurable. We need hardly remind the reader that many have characterised Mr. Froude's description of the Irish people as unjust and undeserved.

LEISURE INTERVALS *by W. Carew Hazlitt, London, George Redway.*

Mr. Hazlitt is a minor poet and the present volume seems to contain all his work up to 1891 that he has thought worthy of publication. We cannot say that it reaches a high level of excellence even as minor poetry goes. But it is not without grace and humour. Perhaps the most ambitious piece is a masque, in Blank verse, *Hylas, or, a Vision of Sea-Folk*. But we think Mr. Hazlitt is most successful in his shorter pieces. The following will give our readers a taste of his quality:—

If I to roses should thy cheeks compare,
And say thy lips more pure than coral arc,
How poor a due it were!
Or should I feign thy hair
In threaded gold adown thy neck did fall,
And that thy features were angelical
My song
Would do thee wrong
Who art thyself, and therein more than all.

If I to nightingales thy notes preferred,
To liken thee unto a lonesome bird,
That mourns her hapless fate,
Were ill to celebrate
Thy voice; and then thine eyes if I should call
Two stars, which from their sphere were seen to fall,

My Muse
Would thee abuse,
Who art thyself and therein more than all.

If I should thee a second Helen paint,
And vow that art to him thee was too faint,
I should praise thee too much,
But yet the truth not touch,
Or if thy form of heavenly mould I swore,
And that thy mind was rich in learnings store,
My pen
Would err again;
For thou'rt thyself—thyself—and nothing more.

It is to be hoped the lady accepted the effusion in the sense the poet intended it.

SPEECHES AND PAPERS by R. C. Dutt.,
C.I.E. (Calcutta, the Elm Press.) Price Rupees Two.
G. A. Natesan and Co., Esplanade, Madras.

In this handy little volume have been collected together the speeches made and the papers written by Mr. R. C. Dutt during the four years of his stay in England from the beginning of 1897 to the end of 1900. His experience as an able and tried officer of Government, his careful handling and sober presentation of facts and figures, and his thorough knowledge of ancient Indian Literature have always won for him a reputation as a clever writer on Indian Politics, Economics and History. We welcome, therefore, this attempt of the publishers to give a permanent shape to his miscellaneous speeches and writings. The volume under notice contains, among others, a paper on 'Famines in India,' contributed to the *Fortnightly Review*, a speech on 'Frontier War and Famines' delivered at Oxford, his evidence before the Currency Committee, his Presidential address at the Lahore Congress and speeches delivered on the occasion of the death of Gladstone and Max Muller, and also Papers on the *Mahabharata* and the *Ramayana* read at the Royal Society of Literature, a paper on Hindu philosophy contributed to the pages of this Review, and another on Hindu religion which was given the place of honour in the *Humanitarian*.

A MATTER OF SENTIMENT by John
Strange Winter : Geo. Bell and Sons

A pleasant and readable story. Dick Vincent accidentally kills his most intimate friend and mate Roger Meredith out in one of the holes in the Australian wilds. Subsequently in a short vocation at home he runs across his old friend's family and falls most desperately in love with Roger's daughter. After a determined fight in his own mind that the daughter of the man, killed, however innocently, still by his hand, was not the one whom he could wed, events and opportunities prove too much for the young man, and in a moment when he caught an innocent avowal from the young girl's lips of her own partiality for him, their redeemable step was taken, and engagement made. Some further anxiety and trouble is kept up by the burden of the secret which has now to be left between the husband and the wife. Finally the accidental meeting by the pair in a Railway Car of a witness to the former tragedy opens the eyes of the wife to the facts, and the story pleasantly ends with the dismissal of the whole trouble which was giving such incessant pain to Vincent, as his wife promptly decides that the thing, was after all 'a new matter of sentiment.'

INTRODUCTION TO SHAKESPEARE by
Edward Dowden. London, Blackie and Son, Ltd.

Professor Dowden explains that this little book is in the main a reprint of the general introduction to the Henry Irving Shakespeare revised and extended by some paragraphs on the great tragedies "and a brief notice of the interpretation of Shakespeare by great actors from Burbage to Macready." The author's view on Shakespeare are too well-known and his critical reputation too well established to make any detailed review of the present work necessary. It covers much the same ground as the Shakespeare Primer but in what would perhaps be considered a more "popular" manner. It has also, what the Primer had not, a historical sketch of Shakespearean criticism.

**DAYNANDA SARASWATI : FOUNDER OF
THE ARYA SAMAJ**, by Bawa Arjan Singh,
Editor, *Arya Patric*, (Punjab Printing Works.)

This is the first of a series of biographical tracts which the publisher intends to bring out. Sketches of the life of Ram Mohan Roy, Keshub Chunder Sen, Buddha, and Nanak will, we are told, form the succeeding publications. In the book before us, the author gives a readable account of the life, character, journeys, and adventures of Swami Dayananda, the great Reformer, the sole object of whose disinterested work was the Regeneration of India. The secret of Dayananda's success as a man and as a teacher is thus explained by the author:—"His great intellect, his generous heart and his deep spiritual fervour—undoubtedly, these contributed a good deal towards his success. But the world does not set much store by these. There must be something more than this in a reformer and that is consistency of thought and act. Dayananda was a model in this respect. His life is a marvellous harmony between preaching and practice. There was not the slightest note of discord. He was the highest living ideal of what he taught. He gave proof of the truth of his teachings in his own person. If he taught that Sannyas was a stage of altruism, was he not a practical embodiment of that teaching? If he taught that the highest phase of Brahmacharya resulted in unusual powers of body and mind, was he not a living demonstration of that fact? To sum up, Dayananda is the prophet of enlightenment, the apostle of liberty and the harbinger of a brilliant future, marked by peace and good-will among men and as such he deserves the respect and reverence of all his countrymen."

Topics from Periodicals.

THE LATE M. JEAN BLOCH.

The subject of the usual character sketch in the February number of the *Review of Reviews* is M. Jean Bloch, the well-known Polish Jew. Mr. Stead is delighted to have an opportunity of paying a tribute to his dear friend and fellow-worker in the cause of peace and a fine type of humanity which exists all unnoticed and unknown in that vast region which was once the kingdom of Poland.

Mr. Stead calls him the Russian Cobden and thus states the reason for it:—

"He possesses an engaging exterior, a great persuasiveness and he is absolutely dominated by his conception of the truth, while he devotes his life to study and to teach. His resemblance to Cobden does not lie in the particular economic doctrine he professes, so much as in the originality and simplicity of his mode of thought and his absolute certainty that he has struck at the root of things. He is like Cobden in being an International man, in taking wide views of things and yet in always standing four-square upon the solid facts and materialities of life. "Give me figures," he said to me; "let me see the facts; it is no use discussing abstractions; we should always see how they work out." What free trade was to Cobden, conception of the approaching extinction of war is to M. Bloch.

At the Hague Conference held for the promotion of Universal peace M. Jean Bloch tried his best to impress in the minds of the people his views of war. This task he was perfectly competent to undertake for "he had devoted the last eight years of his life to the study of the question of the changes which modern science and the growing complexity of social organisation had brought about." He was perfectly convinced that in the modern world war had become an impossible arbiter of international disputes. "His position which he was at all times ready to maintain against all comers was that in the modern world nations could not go to war with each other without entailing a dislocation of the social fabric which would bring about a general cataclysm."

The war of the future must necessarily be a war of entrenchment and defence of fortified positions, which could only be captured when the assailant had an overwhelming preponderance of force. Briefly stated M. Bloch's argument is as follows:—

"A Modern war must be a long war, and a long war must necessarily result first in starvation and then in revolution. It is therefore indispensable to provide some means of settling disputes other than an appeal to a tribunal which could not give a decisive verdict before the costs of the procedure had reduced the litigants to bankruptcy and involved them in social chaos."

That is the reason why he was an advocate of a permanent court of arbitration, whose decisions

could at least be arrived at without entailing as a preliminary, the utter destruction of the disputing states.

He was so convinced of the soundness of his premises and the incontrovertible logic which led to his conclusions that he was often very impatient with those who persisted in regarding a European war as being any longer within the pale of practical politics. "War" he used to declare impatiently "is a folly. It is nonsense, your war, you cannot make your war without entailing a revolution in which the State itself will disappear." M. Bloch tried his best to impress upon his listeners his views of war and the measures to suppress it. Mr. Stead adds:—

Looking back, I can recall few pleasanter pictures than that of M. Bloch patiently, persistently, wearisomely expounding his great thesis that war will be no more owing to the operation of natural causes. I still see his genial smile and the kindly, patient persistence with which he would answer all objections and smooth away all obstacles in order to convince his listeners, that the goal which eager hearts had longed for through so many centuries was actually at last within sight of a sceptical world. He stood as a kind of god-father of the Conference and acted throughout as a herald of the approaching reign of peace. He was over the apostle, zealous, laborious, willing to compass heaven and earth to make one proselyte."

He lectured at the Hague, in Paris, and in London and drew up a vast scheme, extraordinarily perfect in detail, for a propaganda against militarism in Europe—a project which, unfortunately, he did not live to realise. His zeal for ideas never hampered him in his career of practical good. In Warsaw he was better known as the advocate of all good humanitarian work. He was ever eager and enthusiastic in everything calculated to ameliorate the bitter lot of the poor. He taught the Russians the value of railways, of intensive agriculture and of practical education, and thus did more than any body else to arrest the process of economic decay begun by the Emancipation.

Such is the person whose death is little short of a European misfortune, since it has caused a void in the propagandists of peace which there is no one to fill, "while to the very wide circle of those who had the privilege of working with him in the cause of peace, it occasioned the poignant regret which is only felt at the loss of a dear and valued friend.

Shakespeare's Macbeth & the Ruin of Souls.

BY THE HON. WILLIAM MILLER, C.I.E., LL.D.,

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BANKIM CHANDRA CHATTERJEE AND HIS NOVELS.

Mr. R. C. Dutt gives, from personal knowledge, a very appreciative sketch of the career of Bankim Chandra, in the *Indian Magazine and Review* for February. Bankim was born in 1838. In early years he served apprenticeship in the *Parbhakar* journal under Iswar Chandra Gupta. Shortly after he had passed his B. A. examination, he became a Deputy Collector and served in several districts as such. But he felt himself instinctively drawn to literary work and contributed not a little to enrich Bengali literature during the decade from 1854 which has been a bright period for Bengali literature. Of this period Mr. Dutt says :—

The eminent Vidyasagar inaugurated the great widow-marriage movement, and also published his greatest work, *Sitar Banabas* within this decade. Ram Narayan Tarkaratna began and Dina Bandhu Mitra completed, the inauguration of the modern Bengali drama within these years. Madhu Sudan Datta erected his monumental epic in blank verse, and Bankim Chandra founded his new school of fiction within this memorable decade. It seems as if the literary activity of the century reached its culminating point in the decade closing in 1864. All the best works of the best writers—Vidyasagar, Dina Bandhu, Madhu Sudan, and Bankim Chandra—were crowded within these ten years.

The early works of Bankim Chandra Chatterjee were novels of Hindu life. His first historical novel appeared in 1864, which is now regarded as one of the greatest works in Bengali literature. *Kapsala Kundala*, *Mrinalini*, *Bisha Brikkha*, *Debi Chaudhurani*, *Anandha Matha*, and *Kristna Kanta's Will* and other novels, social and historical, were the subsequent productions of his creative genius, which found thousands of readers all over Bengal: Says Mr. Dutt :—

Whatever he touched glowed with the light of his genius. For a generation the reading world feasted on his unceasing productions; Bengali ladies in their zenana bought every new work of Bankim Chandra, as it issued from the Press and young men in Schools and Colleges knew his latest utterances by heart.

Not were his works confined to novels alone. He took up the study of religion and produced a great work on Krishna, in which, *inter alia*, he proved to the world that the story of the amours of Krishna finds no mention in the earliest works in Sanskrit literature and that it is the mischievous fabrication of later poets. Bankim Chandra passed away in 1894, lamented by young Bengal which looked with profound interest and veneration to the sound of his harp.

THE INDUSTRIAL DEVELOPMENT OF INDIA.

Mr. E. B. Havell, Principal, Government School of Art, Calcutta, contributes an article to the latest number of the *Dawn* on the Industrial development of India. The essential conditions necessary for the development of Industry are, he says, the state of a country's natural resources, its geographical position, its political advantages and its manufacturing capacity. Now India is richly endowed in natural, physical and geographical advantages and politically India is a partner in the great British empire. Mr. Havell points out that, progress in manufacture will always be slow until scientific and technical education in this country have advanced beyond the theoretic smattering required for academic degrees into the higher plane of sure and practical knowledge, which is generally only reached after academic distinctions are won and until some means have been discovered to make the field more attractive to private enterprise and capital than it is at present.

Private enterprise in this country has not yet acquired the same robust and independent constitution as it has in Europe or in the great English colonies. Mr. Havell therefore says :—"Considering the strenuous official support given to private enterprise in most European countries and in America, I venture to think it would be well for India if we departed a little more from our traditional policy of investing capital in long established traditional grooves." There are some who think that the Industrial regeneration of India depends on her artisans joining in the great competition for export markets which is going on in Europe and America. Mr. Havell confutes them thus. "The Indian artisan is unfitted both by disposition and habits from entering upon such a struggle." India could not even beat out China and Japan who compete in the same market. Mr. Havell further thinks that the introduction of machinery, and the consequent fatal policy of turning the skilled Indian craftsmen into a coolly mending a machine, have done much to the deterioration of Indian industry, first because of the ignorance of the requirements of foreign markets and secondly of want of business capacity. He says :—

"Hand manufactures can be developed and improved quite as much as mechanical industry. A country like India, which possesses thousands of skilled handicraftsmen and where the cost of living is many times cheaper than it is in Europe possesses a source of potential wealth capable of almost indefinite expansion."

He finally affirms that if the same amount of thought, enterprise and capital had been spent during the last 50 years in developing the handicrafts of India, as have been spent in establishing mills and factories on the European system, India would have been richer by crores and crores of rupees.

OM AND THE GAYATRI.

The Countess Evelyn Martinengo-Cesaresco, explains the *Om* and the *Gayatri* in the February number of the *Open Court*. We might approach nearer to understanding *Om* and the *Gayatri* also, if we could regard them less as prayers or confessions of faith than as sacraments. It is utterly impossible to put into language the ideas involved in any sacrament. So it is with *Om*: so it is with the *Gayatri*. They form the effluence of the ineffable and effect a union in some unfathomable manner, between the transitory and the eternal, between the individual and the universal, between the book and its author.

The Countess takes considerable pains to explain the significance of *Om* and the *Gayatri*. She protests against the attempt to detract from "the sublime character of the ancient words which are for the pious Brahmin the most precious inheritance of his race" and quotes with approval Mr. R. W. Frazer's criticism of the *Gayatri*. Says Mr. Frazer in his 'Literary History of India,'

... "Underlying all is no uncertain sound of the sad wail that ever and again murmurs from the seer's soul declaring that man's proud answers but mock at its yearning cry to know the invisible, the unbound. The true end of the struggle is found in the one verse handed down from Vedic times and murmured by all orthodox Hindus of to-day as they wake to find the reality of the world rise up around them and still know that beyond the reality is that which they still yearn to know. Like all the best of Vedic hymns this hymn known as the *Gayatri* has its form in its sound and therefore remains untranslatable in words even as does music which rouses, soothes and satisfies in its passing moods. It still holds its sway over the millions who daily repeat it, as it also held entranced the religious fervour of countless millions in the past. The birth-right of the twice-born was to hear whispered in their ear by their spiritual preceptors this sacred prayer of India:—

Om. Tat Savitur varenyam
Bhargo devasya dhimahi
Dhiyo yo nah prachodayat

Let us meditate on the to-be-longed-for light of the Inspirer; may it incite all our efforts.

Once heard in the land of its own birth, once learned from the lips of those whose proudest boast is that they can trace back their descent from the poets who first caught the music which it holds in every syllable, it rings for ever after as India's noblest tribute to the Divine, as an acknowledgment of submissive resignation to the decrees which bid man keep his soul in patience until the day dawns when all things shall be revealed."

The Editor of the *Open Court* remarks:—

The prayer, though still reverencing the sun, points beyond to something greater, to that light which is the guide of our mind and of which the sun is a mere symbol. India is the classical country of the religio-philosophical development of mankind, and the *Gayatri* is the great landmark on the road from the ancient sunworship to a purely philosophical conception of the deity.

THE HIGHER EDUCATION OF INDIAN WOMEN.

Alfred Nundy, Esq., Bar-at-law, Gorraekpur, contributes to the *Indian Ladies' Magazine* for February an article on 'the higher education of Indian women.' He joins with Mrs. Annie Besant in deprecating the introduction of higher education for women, and pleads for "that education which will make them immeasurably more useful as the wives and mothers they will be." He says that higher education is unnecessary for Indian women, and even goes to the extent of affirming that it has done considerable harm and is likely to do greater harm as the number goes on increasing of those who are eager to grasp at it.

It neither qualifies them for the chief end they ought to have in view, that of becoming good wives and mothers, nor happily has any one yet desired to lay down that one of the qualifications in a wife should be a graduate, or that the duties of a mother cannot be satisfactorily performed where there is an absence of knowledge of higher mathematics. The harm of higher education is that many persons have become physically unable to bear the strain put on their minds.

Mr. Nundy then scathingly criticises the higher education of women. He believes "that the end that the education of girls ought to have in view is to make them good wives and mothers." Now they cannot become mothers unless they are wives and they cannot become wives unless some one asks them to fulfil that position. Unfortunately that some one is the somewhat depreciated article called man, and he has the bad taste, we will call it, of fighting shy of lady graduates. It may be he is a graduate himself but the average graduate is generally a poor man who has to make his way in the world and he looks in a wife rather for one who will be able to make a good omelette or a delicious *hulwa* and be otherwise an expert house keeper than for one who will fling a mathematical problem at his head or quote Shakespeare, and Milton when a badly cooked dinner is served before him.

"It may be that a happy combination of circumstances has permitted, in a stray case, a young lady to go through the higher paths of learning without having injured her health and without being less gentle and less womanly; it may have provided her with a home and a position, where placed above the sordid wants of everyday life, she by her intellectual conversation lends a peculiar charm to the kindly hospitality which is dispensed by her and it may be that time and opportunity are afforded her for using her superior gifts in literary efforts for the elevation of her sex. But such a case is rare."

HUNGER—WORN INDIA.

This is the title of a somewhat trenchant criticism on the present condition of India by Mr. A. J. Wilson, Editor of the *Investor's Review*. The article appears as a special supplement to the March number of the *Positivist Review*. He says:—

"To unprejudiced observers the growing precariousness of the financial position of India's alien Government has been obvious for many years, but it is not so to the bureaucratic machine. Individuals among the British administrators of India have always seen the danger and understood the problem. One of the most painful aspects of the subject put before the mind in Mr. Digby's book, "'Prosperous' British India," may be described as the thread of gold that runs all through the welter of woe he puts before us. Official after official penetrates the darkness, and puts his finger on the open wound through which India's life blood is being drained away, but custom, routine, the deadly grinding of the bureaucratic engine of government stifles every enquiry, puts aside each warning and protest. Instead of seeking at least to delay the inevitable ruin by genuine reforms, the average official, acting as a part of the great governing machine, suffers himself to be led away in chase of will-o'-the-wisps, allows militarism to dominate him, and shirking the problem of the annual drain of the home charges tries to disguise its deadly effects by such an expedient as an artificial exchange, or by the spendthrift's resort to the usurer. Who does not remember the hot debates that arose over the question of "a gold standard" for India? It was the one remedy, we were told that would prevent the frightful drain from culminating exhaustion, and the Official mind refused absolutely to consider for a moment the expediency of lessening the London drafts upon Indian treasuries so as to take something off the load the Indian people were called upon to carry. At last the silver rupee was "fixed" at a convertibility of 1s. 4d. into gold, and now the official mind is happy. It no longer has the trouble of working out each year what was called the "loss on exchange" involved in remittances home, and it does not see what a frightful additional tax this artificial exchange has thrown upon the Indian people. It amounts to an enhancement of nearly 60 per cent. in their burdens. If the Government had been able to increase the purchasing power of the rupee within India at the same time that it tried to fix it as against its creditor in England, there might have been some excuse for the expedient; but as a matter of fact the purchasing power of the rupee in India has not been strengthened, but weakened by the device."

Mr. Wilson gives a good deal of statistical evidence to prove that the purchasing power of the rupee is declining in India and that the artificial exchange aggravates this and increases the misery of the people. Mr. Wilson points out:—

The latest returns of Indian foreign trade for a complete year bring us down to March 31, 1901. In the twelve months then ended, the exports of Indian merchandise amounted to Rs. 1,042,000,000 worth in round figures. This is taking the rupee at 1s 4d. in the £1. but the real value of the silver rupee in gold is round about 10d. These exports were, therefore, under-valued to the extent of about 60 per cent. measured by the intrinsic value of the rupee, and to something like this extent the producer and factor were deprived of their legitimate price, or at least of their chance to secure that price. Increased poverty naturally follows lessened power to meet the ever pressing demands of the tax-gatherer and of the money-lender.

Put the thing in another way. Assume that this Rs. 1,040 millions worth of commodities produced £ 70,000,000 to the vendors in the countries to which the goods were consigned. By compelling the vendor to convert these sovereigns into rupees at 1s. 4d. to the £, the product in India, as expressed by this inflated currency, the only possible currency that can be employed there by reason of the poverty of the masses, the proceeds would amount to Rs. 1,050 millions, whereas were the silver rupee at its natural value the return in Indian currency would have been Rs. 1,680 millions, there or thereabouts. It would be relatively just the same did the Indian produce, entered at ports of export as worth Rs. 1,040 millions, yield only £50,000,000 in the English market, and we must never forget that the mere fixing of the exchange value of the rupee by fiat from above does nothing whatever to control the market price of Indian produce at points of sale, it merely, as long as the fiat can be upheld, intercepts the chances of gain, or apparent gain, so that the cultivator in India is cheated out of his legitimate return, and, in proportion as he is so, crippled in his capacity to pay his way at home. For example, £50,000,000 represent only Rs. 750,000,000 on the artificial basis of exchange, whereas on the real value of the silver rupee the equivalent would be about Rs. 1,200 millions.

Commenting on this, the writer observes:—

"Doubtless in the end this depreciated rupee would cripple the Indian Native in his domestic payments, because its purchasing price would decline in India, and rent and every other item of expenditure would be forced up; would require more in coin to square accounts; but the process

of depreciation is a slow one, and meanwhile India would get time to turn round. The export business, in other words, would be profitable, or at least stimulative to India, if conducted on the natural value of the rupee, inasmuch as it would have yielded many more rupees or their equivalent in silver would have brought more silver into India, thus easing the cultivator, the taxpayer of all classes, by giving him on better terms the coin with which to meet the obligations laid upon him.

As a remedy for all these evils, Mr. Wilson advocates thrift, economy, cessation from borrowing and living within one's means. Mr. Wilson protests against the reckless borrowing in England for public works in India and the study and systematic increase of the Home charges of the Indian Government since the days of the mutiny, due chiefly to the tremendous increase of the white garrison in the Peninsula.

"Not content with that they altered the character of the British army in India, and made it part of the Imperial force, thereby, as was proved before one of the numerous financial committees of enquiry, almost quadrupling the cost of the white recruit to the Indian Exchequer. Then began also a system of furlough and absentee allowances, pensions and so forth coupled, in the Civil Service, with fixed and comparatively early ages for retirement under which a man could earn his pension of £ 200 to £ 300, and be home in England for good before he was fifty, with the result that pensions and allowances of these descriptions alone now cost the Indian Treasury every year upwards of £ 5,000,000 in England. While however, the military passion was as it were merely incubating and growing, ready for fresh adventures, or exercising itself in little expeditions of conquest in Burma or around the North-West frontier, the passion for railway expansion drew into India upwards of £ 100,000,000 of British money, mostly at 5 per cent. guaranteed interest, and India in virtue of that railways building craze, partly military in origin, is to-day endowed with over 14,000 miles of broad gauge railway, the most expensive in the world—railways of the same gauge, that is, as was formerly exemplified by our Great Western line—and has altogether some 26,000 miles of railway of all gauges, many of them financially unproductive, built purely for military purposes. This craze rules now; and about £ 230,000,000 of British money is already sunk in such enterprises. No diminution, therefore, can be made in the burdens of India under that head except by default, and what I am solicitous for is the avoidance of default."

Mr. Wilson suggests the following Reforms :—

It is still, I think possible for this worst evil to be averted, if the spirit of militarism which first really obtained dominance over the Civil Government in India when Lord Lytton launched into war against the Amir of Afghanistan in 1879, can be abated, and if the system of service, whether for British soldier or civilian, can be changed so that the load of pensions now so heavy might be lightened. A claim constantly advanced by the Indian Congress is for larger share in the domestic administration to be given to Natives. That might be done, but also those Englishmen who go to India as civilians or soldiers ought practically to go there for life, as the servants of "John Company" did. Their furloughs and furlough allowances ought to be reduced, and pensions ought not to be granted at the early age, or on the scale now prevalent. In this way, within a very few years the heavy sum now disbursed by the Indian treasuries on the above noted lavish scale might be cut down by one half.

Still more important is the saving that might be effected were the army to be reduced, and its status changed, so that it becomes little more than an armed police. The reduction in the white garrison caused by our South African war has been effected without disturbing the peace of India for a moment, and I believe the garrison might be still further reduced until, instead of being 70,000 men or thereby at its full complement, it came to be only 30,000 to 35,000. The fact that railways now penetrate into every district of India should make this reform easy, looking at the docility of the people, and the Native army might in the same manner be cut down the whole, British and Indian, being converted mainly into police or militia. How much might be saved by such a measure as this cannot be estimated beforehand, but it does not seem unreasonable to reckon upon an economy of £8,000,000 to £10,000,000 per annum. Assume that in these roughly outlined directions £10,000,000 altogether could be saved, that would represent at least Rs. 150,000,000 per annum set free, even on the artificial calculation of the Indian official, for the purposes of remitting taxation, executing public works without borrowing, establishing land banks, and agricultural aids of every description throughout the country, by help of which it might recuperate and, for another generation or two, stagger along under our rule. At best it is but a postponement, because no country can exist for ever, still less flourish, under the conditions we have established in India.

WIRELESS TELEGRAPHY.

Wireless telegraphy has of late attracted more interest and attention than perhaps any other problem in electrical engineering.

Its progress has not been slow. Five years ago the system worked satisfactorily over a distance of about two miles. Since then its range has been rapidly increased, until, a few months ago, by means of improved and attuned apparatus, a distance of over two hundred miles was successfully bridged, and wireless communication at this distance is now an every-day occurrence.

THE APPARATUS.

A writer in the *Review of Reviews* gives the following description of the apparatus:—

Let us take an imaginary journey on the *Lucania* and see how she is able to talk with her sister-ship the *Campania*, although neither vessel can see the other. A wireless message is going to be sent from the "Transmitter" on the *Lucania*. This consists of a few cells, an induction or intensity coil, and two small brass spheres each fixed on a rod. When the current is sent through the coil sparks pass between the brass spheres, and these sparks give rise to electric waves which radiate out into space in all directions. To send messages capable of being read a "Morse key" is needed, just as it is in ordinary telegraphy: each letter of the alphabet on the Morse code is represented by a combination of dots and dashes, and the "key" is depressed for a long or a short period according to which letter is sent. Electric waves are now travelling outwards from the "Transmitter" on the *Lucania*, and far away, quite out of sight, is the *Campania*. Suddenly the attention of the telegraphist in charge of the instruments on the latter is called to his receiver; it has commenced to take down, in dots and dashes on a strip of paper, a message that has arrived across the ocean from an invisible and, as yet, unknown source. As he interprets the signals he learns that they have come from the *Lucania* and he proceeds to send a reply to the distant liner. The receiver on the *Campania* consists of a tiny tube of glass partially exhausted of air into which two wires are set almost touching each other, but prevented from quite doing so by means of a tiny pinch of metal filings. Connected with the tube is a cell, and connected with this cell is a battery of twelve or more cells, which in its turn is connected with a post-office "relay" and a Morse printing machine.

It seems to be a matter of popular belief that any receiver within effective range of the transmitter is capable of picking up the messages sent, or in other words, that there can be no secrecy of communication by the system.

The following from the *March* number of the *Century* explains how Mr. Marconi proposes to overcome this objection. Says Mr. Marconi:—

"Were this so, a very important limitation would be imposed upon the practical usefulness of the system, but by the introduction of important and radical modifications in the original system and by a systematic application of the principles of electrical resonance, this objection has, in very great measure, been overcome."

The maximum working speed of wireless telegraphy is from 20 to 25 words per minute at present, while with the modern duplex and quadruplex telegraphy 6000 over land wires and 2000 over Submarine Cables are possible every minute. Other fundamental objections are (1) It is subject to designed interruption on the parts of others (2) interruption from storms.

HOW MARCONI TUNES.

"An Authoritative Account of Marconi's Work" in the *March Century*, with a prefatory endorsement by the inventor contains the following:—

To give a clear idea of the significance of this electrical tuning between the transmitter and receiver, it is convenient to consider the well-known analogy which exists in the case of sound-waves. Every one is familiar with the fact that on singing a note, say middle C, into a pianoforte, the middle-C string will respond and vibrate in sympathy, but that the other strings do not. Or, again, on bowing one tuning fork, a second tuning fork will respond if of the same pitch or tune.

The note of the sound emitted by any instrument is dependent upon the period of vibration, or oscillation, of the instrument, which, in case of the middle C, is two hundred and fifty-six per minute. Alter this ever so slightly, and it will no longer respond, it is no longer in sympathy, or tune. The period of vibration of Marconi's electric waves varies, according to different conditions of capacity and self-induction, from three millions to half a million per second. The capacity and self-induction of the receiving-circuit are therefore carefully adjusted to those of the transmitter, and when this adjustment is exact, the receiver, being in sympathy, will respond, while others will not. In a syntonized receiving-circuit the vertical wires, instead of being connected directly with one of the plugs of the coherer, are joined with one end of the primary of a small induction-coil, the other end of which is earthed. The secondary of this induction-coil is connected with the coherer in combination with a suitable capacity corresponding to the periodicity of the transmitting-circuit.

By this means Marconi has been enabled to connect two differently tuned transmitting-circuits

with one perpendicular wire and send two messages at the same time, each message being received thirty miles away upon a single perpendicular, and passed down independently to its own tuned receiver.

FACTS ABOUT MARCONI'S SIGNAL.

Last spring Mr. Marconi's company decided to build a large power-station at Poldhu for long-distance signalling. It consists of the buildings in which the instruments are stored and twenty large masts, each two hundred and ten feet high, upholding aerial wires, and connected so as to form a gigantic electrical conductor. The power to energize this is supplied by a generator producing an electrical force equal to thirty-eight horsepower. With this apparatus, signalling was conducted all the summer with Crookhaven, on the west coast of Ireland, two hundred and twenty-five miles away, this station being chosen because there was an almost unbroken stretch of water between the two. While receiving messages at Crookhaven, Mr. Marconi observed that the strength of the signals was such that he felt sure they would be intelligible at ten times that distance.

COST OF OCEAN CABLES.

Mr. Marconi also believes that his system may become a formidable competitor against the ocean cables. To do so on land is not so easy, as the lines there cost only one hundred dollars a mile, whereas the cables cost one thousand dollars a mile, and require expensive steamers to repair and maintain them. A trans-Atlantic cable represents an initial outlay of at least three million dollars, besides the cost of its maintenance. A Marconi station can be built for sixty thousand dollars. Three of these, bringing the two worlds into contact, will cost only one hundred and eighty thousand dollars, while their maintenance should be insignificant.

MR. MARCONI'S CONCLUSIONS.

The following is a digest of the inventor's conclusions given in his own words:—

The wireless agency is most effective over marine areas. The unbroken surface of the ocean enables distances to be obtained and results achieved which cannot be approached on land. Over low-lying country two thirds of the distance can be reached, but over tracts where the usual diversified topographical features are found the potency of the vibrations is reduced to one half what it is at sea. High hills do not constitute an obstacle but the ground itself retards the signals. The vibrations seem to reach slightly farther in fog than in fine weather; atmospheric conditions do not seriously affect them; electrical disturbances are their only foe. Mr. Marconi's later experi-

ments appear to indicate that a pole two hundred feet high gives the best results, as the wire suspended from it comes into contact with sufficiently varied atmosphere strata, while at the same time it can be made thick enough to receive a substantial electrical influence from the radiating ether waves which are caught by it. With a balloon or kite elevated to an altitude of four hundred feet or so, the wire must be very slight, and the ceaseless swaying of the upholder also interferes with the reception of definite signals. Strangely enough, a horizontal aerial wire is of no value, gives out no energy for his purposes, and was long ago discarded. Nor is it an advantage, in marine signalling, to set up the pole or kite on a high hill.

TELEPHONING WITHOUT WIRES.

Mr. Marconi has been unable to transmit actual speech by the electric waves which he employs, and, so far as one can see, says the writer in the *Review of Reviews* of this is an impossibility with his apparatus. By means of the "Orling-Armstrong system" he observes, however, that wireless telephony is quite feasible, and the writer recently had an opportunity of seeing this system at work at Hughenden. As it promises to be very useful in many circumstances, and as the apparatus is both cheap and portable, it merits a brief description here. The transmitting and receiving apparatus is contained in a small box, which is connected up by wires to two iron stakes, driven in the ground some little distance apart. This constitutes a "station," and at the other distant station are similar arrangements. The writer spoke into the transmitter, and the vibrations of his voice were carried at lightening speed through the earth to the operator at the other station, who repeated the message, thus showing that it had been received. You may drive the stakes into the ground wherever you like, or you may immerse them in water, and provided you have a receiving apparatus you can converse with any one up to distances of twenty or thirty miles. For longer distances more apparatus would be necessary, but the system would be the same. The inventor's claim that they can so "tune their instruments" that any mixing up of messages or tapping of signals would be impossible."

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INDIAN DISABILITIES IN SOUTH AFRICA.

"Historicus" contributes an article to the *Madras Review* on Indian disabilities in South Africa. Natal is a fertile country but its development was impeded owing to the want of labour, the native Zulu being far too indolent to work. In 1860, "when the progress and almost the existence of the colony hung in the balance" the aided immigration of British Indians was decided upon, the colony making a grant of £10,000 towards the cost of importation of the immigrants. The Indians are chiefly laborers in the tea and sugar industries and coolies on the Railway and in the Municipalities. "Indian immigration" says a colonist of note, "brought prosperity, prices rose, people were no longer content to grow or sell produce for a song." "The Indians had made Natal" says another Natalian, "the Garden of South Africa."

The beginning of the year 1894 marks a decline in the status of the Indian, for from that year laws were passed restricting his privileges. The abolition in that year of the grant of £10,000 referred to above, marks the commencement of a series of grievances, a few of which are given below :—

Till 1893 all British Indian adult males who had a certain property qualification possessed equally with the colonists full electoral rights. The first act of the responsible Government in Natal was to pass a bill in 1894, which while leaving the electoral rights of Asiatics untouched, provided that no further extension of the franchise would be made to them. The reason alleged for passing such a law was that Asiatics were not accustomed to the franchise rights but the real purpose of the Bill was to degrade the Indian to the level of the Kafir. Petitions to the local Parliament having been fruitless, the representations made to the Home Government resulted in the withdrawal of the Bill and its replacement by one which excluded from the franchise such persons whose native countries did not possess elective representative institutions founded on the Parliamentary Franchise. This Bill obviously had the same affect as its predecessor, in denying the right of citizenship to British Indians, as India did not possess representative institutions of the required character.

Till 1893, the Indian immigrants were required to serve only for a period of 5 years according to the terms of their indenture; after which term they were free to settle down in the colony or to return to India. In that year the Colonial Legislature passed an Act providing that all Indian

immigrants, who on the expiry of their term of indenture, refused to bind themselves to serve for a further indefinite period should return to India.

Every coloured person is prohibited from being out at night after 9 o'clock without a pass. There is also a law which requires every Indian to produce his pass when required. This measure is ostensibly intended to detect deserters but really operates to circumscribe the freedom of the Indian. The Indians are prohibited from travelling by tramcars and first and second class Railway compartments and from using the hotels and public baths.

Allegations are not wanting on either side; the colonists allege that if the Indians are granted free rights of citizenship, they may ultimately swamp the European electors. The Indians, on their part affirm that all restrictive legislation is due to the feeling that the Indian is more successful in competition and lives on less than the poorer portion of the white colonists. "Historicus" deplors the position of the Indians in South Africa, and urges the Imperial Government to take immediate steps for the recognition of the status of the Indians as British subjects and years for the day "when a native of India can travel all the wide world over, enjoying, in full, the rights and the status of a British citizen."

THE SCIENCE OF PENALOGY.

An interesting article in the February number of the *Arena* suggests that the twentieth century is likely to witness a revolution in the treatment of criminals. Mr. Stratton enlarges on the uses of music as a means to promote moral improvement among the lawless elements of society. According to him, all crime is a moral disease and should be treated as such, in order that society may be properly protected. His suggestions concerning the efficacy of music on criminals of all grades are worthy of attention. Himself, presumably, a practitioner of musical therapeutics, he is fully equipped for the discussion of his subject and quotes the opinions of authorities who agree in his view that music can be made a valuable ally in ethical training.

Mr. Stratton makes a strong argument in favour of his theory that criminals and, indeed, society in general, can be morally uplifted by musical means and that the practicability of using music for this purpose lies in its application to the need of the individual.

DEPARTMENTAL NOTES.

Educational

STATE-AIDED EDUCATION IN INDIA.

At a recent meeting of the East India Association Sir Roland K. Wilson advocated the withdrawal of all State-aid education in India. He did so with a view to see retrenchment in India carried on for the relief of the poverty-stricken people.

Sir Roland said that India ought to have no Education Budget at all. He argued that the question was not whether education is a good thing in itself, not whether voluntary efforts for its diffusion are meritorious, but whether it is absolutely necessary to take from individuals without their consent, for the support of the particular kind of education favoured by the Government, the money which they prefer to keep and spend in another way. If all disbursements for education were stopped, would, he asked, the whole machine be paralysed? "Surely not," he replied, and added: "Everything would go on as before, except that school managers would be compelled to reduce their establishments or to raise their fees, or to increase their subscription lists; and would, on the other hand, be free to modify their arrangements to suit the wishes of subscribers and customers without waiting for the approval of the Government Inspector. Whether this would be a change for better or worse, I will consider presently; for the moment I am only concerned to insist that, at all events, the consequences would not be so appalling as to silence all pleadings for economy." The present expenditure he said, was a million and a-quarter sterling annually, a small amount which one day might grow to a very large sum. The education of the masses, he considered to be a waste of public money, and scorned the idea that the people had any "right" to receive primary education.

As to what would happen if the rope of State aid were cut, the author had no doubt. "Considering how deeply respect for learning is rooted in Hindus and Mahomedans, he saw no reason to apprehend that voluntary support of education would fall below a standard fairly corresponding to the actual resources of the population, and added:—

Of the institutions that survived the loss of State aid some would do so by working on strictly commercial lines, supplying only those kinds of instruction in which teaching could be had cheap, or for which parents would be able and willing to pay high fees. And in this connection, I may observe that a powerful stimulus would be applied to private educational enterprise were the Government

at last to consent to the holding of examination in India for the higher Civil Service. Other schools and Colleges would appeal for public support on non-commercial lines. The great missionary societies, for instance, no longer lured aside from their professed aim by the bait of Government grants, would cease to fill their schools with non-Christian children under non-Christian teachers in the strange fashion described to us the other day; would concentrate their attention on the conversion of parents, and on making model Christians of the children entrusted to their care as Christians, and would be able to ground their appeals to their wealthy co-religionists at home on a more intelligible basis.

"Personally, I should expect and welcome a great increase of activity on the part of the Brahmo Samaj and kindred bodies, which aim at disengaging the purer from the baser elements of Hinduism; and if the orthodox Hindus and Muhammadans were to be goaded thereby into educational rivalry, so much the better. The Daya, nand Anglo-Vedic College, under the management of the Arya Samaj, shows what may be done in this way. All that is really alive in native society would show quite another sort of energy when relieved from the enervating influence of official patronage and control, and at the same time from the fiscal oppression which is the obverse of the same phenomenon; while the Government, no longer hampered by inconsistent pledges, and discredited by poor performance after large promises, would be vastly stronger for its proper work. It might then educate by example more effectively than now by precept."

LEE-WARNER'S "CITIZEN OF INDIA."

In the course of his paper Sir Roland K. Wilson criticised Lee-Warner's book thus:—

"Until recently the Government concerned itself almost as little about moral as about religious training, and it is quite an open question whether it has strengthened or still further weakened its position by abandoning that attitude, and (among other things) bestowing its *imprimatur* on untheological moral text-books, compiled expressly for school use. I do not gather that these text-books have, been received with much enthusiasm, but cannot speak of them from personal knowledge. There is, however, one officially recognised text-book, dealing with that special branch or offshoot of ethics commonly known as politics, which I have read, and about which I have something to say. I refer to Sir William Lee-Warner's "Citizen of India." "I observe that it has been recommended for school use in all part of British India, and is even supplemented by an "Authorized Guide" for examination purposes. Con-

sturring in the general appreciation of the versatility of Sir William's genius, and of the excellence of his intentions, I must yet pronounce the official adoption of his book by the Indian educational authorities a grave political indiscretion. I am not quite sure that the permanent mischief would have been greater, though, of course, there would have been more outcry at the moment, if Bishop Welldon's aspiration for the close of the present century had been realized at its commencement, and the Bible had been ordered to be read in all Government Schools. For it amounts, in effect, to imposing a political test on all managers and teachers of State-aided institutions. The little book bristles with dogmatic assertions about matters that are keenly debated, all tending to the glorification of the British Government as it was and is. The title is a misnomer, suggesting, as it does, the possession of those political rights which are, as we all know, withheld for the present from the people of India. It is brightly written, and might pass well enough as a private venture; as a text-book officially prescribed, it cannot fail to be a source of irritation and embarrassment to well-informed and conscientious teachers."

THE TEACHING PROFESSION.

We quote the following from Lord Curzon's recent Calcutta Convocation address:—

I turn to those young men who are going to be teachers of others. I pray them to recognize the gravity and the responsibility of their choice. Rightly viewed, theirs is the foremost of science, the noblest of professions, the most intellectual of arts. Some wise man said that he would sooner write the songs of a people than make its laws. He might have added that it is a prouder task to teach a people than to govern them. Moses is honoured by the world beyond David, Plato beyond Pericles, Aristotle beyond Alexander. Not that a teaching is great or all teachers famous. Far from it. Much teaching is drudgery, and many teachers are obscure. But in every case the work is important, and the workman should be serious. The first thing I would have you remember therefore is that you are not entering upon an easy, or an idle profession. It is the most responsible of all.

When you have realised this guiding principle, the next thing to bear in mind is that the teacher should profit by his own previous experience as a student. He should not inflict upon his pupils the mistakes or the shortcomings by which his own education has suffered. For instance, if he has been artificially crammed himself, he should not proceed to revenge himself by artificially cramming others. Rather should he spare them a

similar calamity. The great fault of education as pursued in the country is, as we all know, that the knowledge is cultivated by the memory instead of by the mind and that, aids to the memory are mistaken for implements of the mind. This is all wrong. Books can no more be studied through keys than out-of-door games can be acquired through books. Knowledge is a very different thing from learning by rote, and in the same way, education is a very different thing from instruction. Make your pupils, therefore, understand the meaning of books instead of committing to memory the sentences and lines. Teach them what the Roman Empire did for the world, in preference to the names and dates of the Caesars. Explain to them the meaning of government, and administration, and law, instead of making them repeat the names of battles or the population of towns. Educate them to reason and to understand reasoning, in preference to learning by heart the first three books of Euclid.

Remember too that knowledge is not a collection of neatly assorted facts like the specimens in glass cases in a museum. The pupil whose mind you merely stock in this fashion will no more learn what knowledge is than a man can hope to speak a foreign language by the aid of a dictionary. What you have to do is not to stuff the mind of your pupil with the mere thoughts of others, excellent as they may be, but to teach him to use his own. One correct generalisation drawn with his own brain is worth a library full of second-hand knowledge. If the object of all teaching is the application to life of sound principles of thought and conduct, it is better for the ordinary man to be able to make one such successful application, than to have the brilliancy of a Macaulay, or the memory of a Mezzofanti.

THE LATE DR. GARDINER.

Dr. Samuel Rawson Gardiner who died recently was born in 1829, and was educated at Oxford. He was formerly Professor of Modern History at King's College, London and later was offered the Regius Professorship of Modern History at Oxford. The Honorary degree of LL. D. was conferred on him by the University of Edinburgh. Among Dr. Gardiner's chief publications may be mentioned the following:—"The History of England from the Accession of James I. to the Disgrace of Chief Justice Coke;" "Prince Charles and the Spanish Marriage;" "England under the Duke of Buckingham and Charles I.;" "The Personal Government of Charles I.;" "The Fall of the Monarchy of Charles I.;" in two volumes; "Introduction to the study of English History.;" "The First two Stuarts and the Puritan Revolution.;" and "The Thirty Years' war.;" and a "History of the Great Civil War.;" in four volumes. In 1894 he published a History of the Commonwealth and Protectorate."

Legal.

THE LAWYER IN MODERN POLITY.

Mr. Haldane, M. P., K. C., speaking recently before the Leeds Law Society made the following observations:—

A learned Judge had once observed: 'The House of Commons is a place where, if a man talks common-sense, they call him a lawyer.' The tendency, however, towards narrow views in the legal profession was one against which they ought all to guard, and it was well that they should try in their contemplation to look beyond the traditions of the past, beyond those even of the moment, and look a little to the future. The watchword of reformers at this time was efficiency—a desire to put the machinery of our Empire upon a better footing; and perhaps the lawyers did well not to leave out of account what was too often forgotten, *viz.*, that in the law they had a potent part not only of the machinery, but of the Empire itself. The lawyer of a hundred years ago was, generally speaking, divorced from human society and human development, as well as from the commercial and business life of the age. They had altered that now. The lawyer had changed (as far as Parliament would let him change), and had become a man of affairs and a man of wider understanding.

THE IMPORTANCE OF LAW.

He knew nothing so potent, nothing so subtle in its binding effects, as the legal machinery of the Empire. The king ruled over 400 millions of people, and nearly twelve millions of square miles, and in these vast territories there were included people of different races with different traditions, different ethical standards, different systems of law in which their morals, standards, and principles were embodied.

From this Mr. Haldane argued that there should be one Final Court of Appeal for the Empire and observed:—

There was, of course, the Judicial Committee of the Privy Council, a remarkable body, and of high repute throughout the country. But the London policeman would not be able to tell the stray traveller where it was or where it sat. Why were the House of Lords and the Judicial Committee of the Privy Council separate bodies? The House of Lords formed the Supreme Court of Appeal for England, Scotland, and Ireland, and the Privy Council for everywhere else. Originally it was not so. With the Empire where it was we must reconsider these things. A supreme Court of Appeal should be one for the Empire. It should sit in two divisions if necessary and it should be housed with at least the splendour which pertained to the House of Lords at the present time.

Unity of appeal in a supreme tribunal would form a new link which would go towards Imperial Federation, in a sense.

THEIR LORDSHIPS ON THEIR DIGNITY.

A writer in *Cassell's Saturday Journal* gives an interesting description of the way in which many of the present English Judges maintain their dignity. The present judicial system could hardly be maintained if there were the smallest lack of dignity. Each Judge has a distinct reputation of his own; broadly speaking these reputations are of two sorts. There is, on the one hand, a passive dignity, as it might be called, by which the desired object is achieved without effort and in silence, the manner being everything; and, on the other hand, there is the active or self-assertive dignity, which relies more or less entirely on force and words at the most critical moments. By either course is the object achieved though opinions differ as to their merits.

It is a happy circumstance that the Judge who has the greatest reputation of all for passive dignity is no other than the Lord Chief Justice, Lord Alverstone himself, and a more capable exponent of the same has never been seen on the Bench. His solemn yet kindly composure on the Bench is one of the most awe-inspiring sights which the Courts can offer.

Now, to take the other extreme, Mr. Justice Bigham, though also in the fullest sense a dignified Judge, customarily adopts a very different style of dignity, and in this respect he has not a superior in the Courts. If he thinks that the glory of his Court is in the smallest danger, he is in a moment up in arms to defend it with all the haughty speech and manner which he can call to his disposal, and those who practice in his Court say that the reserve supplies are not by any means small. His Lordship's pet aversion, and the one which most quickly puts him upon his dignity, is a Counsel or a witness who persists in taking a very contradictory view to that which he has expressed. When this kind of thing has at last got to its limit, the Judge settles himself into his most dignified attitude, and invariably remarks 'Well, we shall see!' That means that the war of dignity has begun, and it also means that the Counsel or the witness, as the case may be, has a very bad time in front of him, for the Judge always wins in the end.

And between these extremes there are, as may be assumed, various shades of judicial dignity of one sort or the other. For instance, Mr. Justice Darling is famous for the assertive dignity of the Bigham school, but built much more upon a basis of refined sarcasm. It is

a principle of his that upon no occasion must Sir Charles John Darling allow himself to take what is described as a "back seat," without at least a desperate effort in the way of biting words to retrieve himself. There are many wonderful instances of his capacity in this direction. For instance once he was pleading in a case at the Sessions, and persisted in continuing his speech much after the time when the Court usually rises for the day. At 5 o'clock he was still proceeding gaily with his oration and then the presiding authority could stand it no longer "Mr. Darling, do you notice the hands of the clock?" he asked with some asperity. Mr. Darling looked back at him in the most grave and solemn manner, and quietly replied, "They seem to me, sir, to be in their normal positions at this time of the day." His triumph was complete, though few juniors would have dared so much.

The time when Mr. Justice Phillimore feels his dignity most at stake, and when he takes up arms in its defence, is when some heedless Jury has returned a verdict directly at variance with his summing up, and in defiance of him as it were. Thus, the Jury had returned a verdict of "Not Guilty" once, when the Judge was strongly of opinion that the prisoner was guilty. Addressing the later therefore, he said, "Prisoner you are entitled to your verdict, and I have to observe that the Jury by the reason they gave for acquitting you have showed that they have failed to understand the case not withstanding all that had been said to them."

Mr. Justice Mathew thinks it inconsistent with the dignity of the Bench that the Court should be trifled with by the fanciful imagery of eloquent Counsel straining after impossible points. He invariably pulls such Counsel up, and thus has the reputation of being the great judicial iconoclast. As for Mr. Justice Wright, he is the most silent Judge, and that is his dignity. A few sharp questions, and a remark in a monosyllable are as far as his dignity will let him go. So also with many of the other Judges, each of whom has his particular pride, and all a common object—the glorious dignity of his Majesty's Judges.

ADVICE TO LAWYERS.

The following remarks were made by Lord Curzon in the course of his recent address at the Convocation of the Calcutta University.

Some of you, whom I am addressing to-day, will pass out of this hall to the study or the practice of the law. You too have your advantages, for it cannot be doubted that the Indian intellect possesses unusual aptitudes for legal pursuits, and that the extent to which the principles as well as the practice of alien systems of law have been assimilated in this country, is one of its most remarkable features. But here, too there are certain pitfalls yawning in front of you which you must endeavour to escape. I do not say that they are not visible elsewhere, or that they are not to some extent common to every Law-court and every Bar. That may be truism, but it is neither a palliation nor an excuse. The first temptation that you should avoid is that of letting words be your masters, instead of being masters of your words. In a Law-court the facts are the first thing; the law is the second; and the eloquence of the barrister or pleader upon the facts and the law is the third. Do not let your attention to the third subject, obscure the importance of the first and second, and most of all the first. Words are required to express the fact, and to elucidate or to apply the law. But when they become the mere vehicle of prolix dissertation they are both a weakness and a nuisance. The second danger of the law-courts is the familiar forensic foible of over-subtlety or as it is commonly called, hair-splitting. We know what people mean when they say, that is a lawyer's argument: and although the taunt may often be undeserved; there must be something in it to explain its popular acceptance. Try, therefore, to avoid that refining, and refining, and refining which concentrates its entire attention upon a point—often only a pin point—and which forgets that what convinces a judge on the bench or a jury in the box is not the adroitness that juggles with minutiae but the broad handling of a case in its larger aspects.

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Trade & Industry.

THE DELHI ART EXHIBITION.

The Government of India have decided that opportunity should be taken of the Coronation Durbar to be held in Delhi next January, for the Exhibition of a typical collection of the best Indian artware. The Government order on the subject gives sufficient information thereon as to the object in view in the arrangement for the exhibition. Besides adding considerably to the attractiveness of the occasion, such an exhibition, is intended, say the government to enable them to form a more general and accurate survey of the condition of the art industries of this country than has hitherto been attempted, and to judge of the extent to which they have been favourably or unfavourably affected by foreign competition or foreign demand. The large sales that may be anticipated at the Exhibition will offer substantial rewards to the Indian artisan; and most of all, is it hoped that, if admission to the Exhibition is strictly limited, as will be the case, to objects representing the highest artistic skill of which the individual handicraft is capable, their collection in a single place may, by the combined stimulus and lessons which it will afford, tend to check the deterioration that is so lamentably apparent in many of the Indian Art industries of the present day, and may communicate a forward impetus that will be both beneficial in effect and permanent in duration.

It is further notified that the exhibition is intended to represent the art of the present, not of the past, except in so far as this has been revived or is capable of reproduction. Articles of foreign manufacture will be rigidly excluded.

Purchases will be made from the Exhibition by the Government of India in the first place, on behalf of the Indian Museum at Calcutta, and doubtless by other Local Governments, with a view to rendering the collections in the various Provincial Museums more representative and instructive than they now are. The remaining articles will be offered for sale, and arrangements will be made for the ordering of duplicates where this is found to be possible. The sales will be controlled by Government, and private exhibitors will appear simply as contributing approved samples. An exception to this rule will be made in the case of jewellery, of which it would be impracticable to organise a representative collection on the above lines. A separate room will be allotted to selected dealers in

jewellery who will be permitted to open stalls and to exhibit and sell their goods under arrangements to be approved by the Exhibition authorities.

With a view to the same result, *viz.*, the improvement and extension of existing Indian Art industries it is proposed to incorporate in the Exhibition a Loan Collection of objects drawn from Museums or lent by the courtesy of private individuals. This collection will be restricted to the best examples of still existing handicrafts and its object will be to supply a visible standard of approved merit, by which artificers may guide their own endeavours in the future. It will not embrace such objects as historic relics or family jewels. The Loan Collection will be distinct from the exhibits on sale and will be accommodated in a separate gallery; but the articles will be arranged on a similar system. The Government will, of course, meet all charges for conveying the exhibits to the Exhibition and for returning them; and will, to the fullest practicable extent, insure them against risk of damage or loss. The Loan Collection must, to a large extent, be dependent upon the voluntary generosity of individuals and Native Chiefs, Noblemen and Durbars.

In order to illustrate the technique of Indian handicrafts it is proposed to permit a limited number of workmen belonging to representative or specially interesting industries to ply their craft within the Exhibition enclosure in completing articles which have been sent in a partially finished state.

The Government of India will also make a grant towards the collection of the proposed Exhibition. Manufacturers or dealers of means will not require pecuniary assistance. The chance of a good market and the assurance of the purchase by Government of some specimens of their best work should be a sufficient inducement for them to come forward, and they should be encouraged to contribute on their own account, subject of course to the condition that their contributions are passed as worthy of being displayed. To those who cannot afford to exhibit on these terms advances will be given, and their exhibits will be either purchased outright by Government when completed or will be forwarded to the Exhibition on condition that advances made on their account will be adjusted on the articles becoming sold.

The selection of the exhibits and the general organisation and the control of the arrangements are placed in the hands of Dr. George Watt, C.I.E., Reporter on Economic Products to the Government of India, with the title of Director of the Exhibition.

INDIAN HIDES AND SKINS.

The London Correspondent of the *Hindu* writes:—

I had a conversation the other day with one of the largest hide and skin brokers in the City of London and who has been connected with the Indian trade for many years. We were talking about the immense number of hides which, through last year's famine, found their way into the London market. They were to be counted by millions, and, at the present time, there are several hundreds of thousands in stock. I said to him:—

"You are likely to be glutted with more of the same sort from Western and part of Northern India; for there will be no rain in most parts of India until June when the monsoon breaks, and the cattle once more must suffer greatly.

"No, no," was the reply. "Very nearly all the cattle must have perished. Anyhow, be that as it may, there are very few left. Why, only last week a number of tanned hides of the commonest kind had to be shipped to Bombay from London. The shoemakers there were running out of stocks."

"This is interesting," I remarked. "I knew that there had been very heavy shipments from India, but I did not imagine that Bombay had been drained to such an extent. I suppose you found many of the hides in poor condition?"

"Yes, indeed they were. There was no substance in them, the cattle being so thin before they died. More than that, I saw, for the first time in more than forty years' experience in the hide trade, hides with holes in them through which the bones had protruded while the animals were still living. As for the price, if they fetched fourpence or fourpence halfpenny per pound it was the best price, possible for them."

"That is a very low price," I remarked.

"That is true. Four times that amount ought to be received for ordinary hides, while four shillings per pound is obtained for the very best Madras sheep skins. Ah!" he proceeded to remark, "there is no tanning better than the Madras tanning. Some of their sheep skins which are now used for binding the finest Prayer Books and such articles of luxury are a pleasure to handle. Why, they can be made so supple that a skin can be drawn through a wedding ring."

"What is the secret of the Madras tanning?" I enquired.

"I do not know," was the reply. "It may be in the water; it may be in the tanning material. But whatever it is, the Madras tanning is good.

I heard much more that was interesting. But the above, a side-light on an Indian industry which like the rest, seems to be getting into European hands, will suffice. One thing that struck me in my friend's description of the very best Madras sheep skins was that of them could be used on illustration such as was employed of the fine Dacca muslins of the eighteenth century, of which it was said that a robe large enough to cover a woman's body could be passed through an ordinary finger ring. There is no doubt, that Indian industrial ability is second to none in the world; it is also second to none in a disastrous sense, likewise, for in no country are indigenous industries in so low a condition as they are in India. It is a thousand pities,—nay, it is worse, it is criminal on the part of India's rulers that this should be so.

THE INDIAN NATIONAL CONGRESS AND INDIAN MANUFACTURES.

The delegates to the last Congress have been asked by the Committee of the Industrial Exhibition under the auspices of the last Congress, to furnish answers to the following questions:—(1) What are the articles manufactured in your District? Have they been declining or making steady progress? (2) How many handlooms are to be found in your district? What kinds of cloth are turned out by them? From where are the thread in use procured? Is coloured thread in use? If it be, then whence is it procured? If it is coloured in the District, is the dye used of indigenous manufacture? (3) State the chief difficulties that confront the manufacture and sale of useful articles in your District? How can they be removed? (4) State the places out of your District where its manufactures find a ready sale? (5) What articles of foreign manufacture find a large sale in your District? Are such articles manufactured locally? If they are, state the difference between their prices. (6) What do you think are the best feasible means by which indigenous arts and manufactures can successfully compete with foreign arts and manufactures.

Medical.**DEAFNESS.**

A circular has been issued by some of the most eminent surgeons and physicians in Great Britain, including the President of the College of Physicians and the President of the College of Surgeons to enlist interest in a movement of a somewhat unusual character. Twenty-seven years ago Dr. Hans Wilhelm Meyer, of Copenhagen, recognised that an enlargement of the glands situated between the nose and the throat, to which he gave the name of adenoid vegetations (now popularly known as post-nasal growths,) was the most fertile cause of deafness and imperfect nasal respiration in children. This discovery represents one of the most important practical advances of modern medicine. "Already many thousand persons, through the timely removal of the enlarged glands, have been saved from life-long deafness, or from the lasting consequence of obstructed respiration and it may be safely said to no one of our contemporaries are we more deeply indebted for the development of a healthy mind in a healthy body of the rising generation than to Hans Wilhelm Meyer. On the recent death of this eminent man, it was felt that his unusual merits deserved unusual recognition, and the proposal to erect a statue to him at Copenhagen has met with a most sympathetic reception, not only by his fellow-countrymen but also by the medical profession of other countries."

HOW DEAFNESS BEGINS.

This statement in great measure (says a contemporary) explains itself. The facts, briefly stated, are as follow:—During the last twenty-seven years it has come to the knowledge of the medical profession that children who breathe through the mouth and are unable to breathe through the nose are in imminent danger of being rendered deaf and that the disease which causes deafness at all ages usually begins in childhood from this cause. Centuries had rolled by millions of people had been treated for deafness, but the casual connection between mouth-breathing and deafness has never been recognised. Dr. Meyer's attention was directed to the matter. He discovered, or rather drew attention to the cause of the obstructed nasal breathing, and also drew attention to the association of deafness with mouth-breathing. This represents, probably, the greatest practical discovery in medicine during the last thirty years. The treatment is as easy as the results are magnificent. It is probable that within a century total deafness will become comparatively infrequent, and it is absolutely

certain that the number of sound, healthy children will be very materially increased, since mouth breathing not causes deafness, but seriously arrests the physical and mental development of the child.

DREAMS.

The following are medical signs of dreams as published in a medical work:—Lively dreams are in general a sign of nervous action. Soft dreams a sign of slight irritation of the brain; often, in nervous fever, announcing the approach of a favourable crisis. Frightful dreams are a determination of blood to the head. Dreams about blood and red objects are signs of inflammatory conditions. Dreams about rain and water are often signs of diseased mucous membranes and dropsy. Dreams of distorted forms are frequently a sign of abdominal obstruction and disorder of the liver. Dreams in which the patient sees any part of the body especially suffering indicates disease in the part. The nightmare, with great sensitiveness, is a sign of determination of blood to the chest.

WHY HAIR GROWS WHITE.

The whitening of hair, so familiar to us, has not been easy to explain. In a recent study of the subject, E. Metchnikoff has found that pigment atrophy of the hair is due to action of phagocytes, or white corpuscles, which absorb the pigment and transfer it elsewhere. In whitening hair and its roots the phagocytes filled with pigment are numerous, while they gradually disappear as the process progresses, and are almost completely absent in perfectly white hair. This discovery of the part played by phagocytes sheds light on various puzzling facts. It shows, for instance, that the sudden turning white of hair in a single night, or in a few days, is a result of increased activity set up in the phagocytes of the hair.

RONTGEN RAYS AND CANCER.

Dr. John Gilman, Professor at the Hahnemann Medical College, Chicago, has made a statement regarding his success in treating cancer patients with Rontgen rays. He said:—"We are in the beginning of an era when cancer will have no terrors. In the last year and a half I have treated over 50 cases of cancer, including many forms of the disease, and have failed to find a single one which did not yield readily. I believe the disease can in future be broken down quickly and surely even when treatment does not begin before the disease is well advanced." Dr. Gilman's method is simple. He gives medicines which will supply the material needed for rebuilding the destroyed tissues and subjects the patient to the influence of the rays for weeks or months as the case may be. Dr. Gilman says that he has lost only one patient thus treated. She died from weakness caused by inability to take nourishment. The cure of Mrs. Orrin Potter, the wife of a well-known Chicago man, has attracted much attention. Dr. Gilman says he has also found the Rontgen rays of great value in destroying tuberculosis germs.

Science.

MOTOR-CAR PROSPECTS.

There are many indications that the motor-car industry will be among the leading industries within the next decennium, and though, perhaps, the impending "boom" will be followed by a reaction ere a solid basis for legitimate enterprise is established, it is not likely that the demand for self-propelled vehicles will be ephemeral in its character, as there are so many uses for them, and their number is certain to increase rapidly within the near future.

To support this assertion, which is made by a writer in the current number of *Children's Magazine*, it will suffice to glance at the records of the Patent Office at Washington, which is a very fair thermometer of the international rise and fall in industrial enterprise as regards the enthusiasm for improvements. The automobile section at the American Patent Office is at this moment by far the busiest of all sections. Applications for patents comprising improvement in motor-cars in general, or in any special part of such cars, have of late become so numerous that five special examiners had to be appointed for this class of applications, and four separate divisions had to be organised, each of which deals exclusively with a certain class of inventions concerned with motor-car problems.

Thus one division is occupied with electric auto-motors merely, a second with steam motors, a third with the various kinds of vehicles propelled by gas (including acetylene motors), while a fourth is in charge of patents referring to compressed-air motors. Under ordinary circumstances, one special examiner is able to deal with all the applications relating to one class of work, and an increase in the number of special examiners is of very rare occurrence. The only occasion when a rush even greater than that for automobile patents at present took place in one of the sections into which the work at the American Patent Office is divided, was at the time when the great bicycling mania, some years ago, was at its climax.—*Invention.*

WIRELESS TRANSMISSION OF POWER.

In the February number of the *Review of Reviews* Mr. Tyte devotes two short paragraphs to the question of "wireless transmission of power" and "wireless lighting." Waterfalls are now harnessed in many parts of the world for the driving of dynamos and the current thus generated is transmitted over long distances by means of wires. The longest distance over which

electric power is transmitted is 221 miles; this is in San Francisco, the power station being situated on the Yuba River. Mr. Nikola Tesla dreams of transmitting electric power over the whole globe. Waterfalls, such as the Niagara Falls, the Victorian Falls on the Zambesi etc., would supply the power for making the Tesla oscillators. The export of power would then become the chief source of income for many happily-situated countries, as the United States, Canada, Central and South America, Switzerland, and Sweden. Whenever you wanted it electricity would be on tap; you would simply erect a pole and draw off as much current as you required. Chimneys would be abolished, smoke would be a thing of the past—for coal would be no more used—overhead wires would be superseded, and the clean and smokeless, wireless current would do all the work that is now done by steam, gas, and other engines.

"Men could settle down everywhere," says Mr. Tesla, "fertilise and irrigate the soil with little effort, and convert barren deserts into gardens, and thus the entire globe could be transformed and made a fitter abode for mankind."

WIRELESS LIGHTING.

Numbers of house-holders prefer to use gas for domestic lighting, as they do not wish to go to the expense of having their houses "wired." Perhaps in the future gas-pipes and wires will be no more used. Power will be transmitted from waterfalls without wires, and our homes will be lit without the employment of wires. Mr. Tesla some few years back, showed at the Royal Institution how alternating currents of some 50,000 volts could be made to light vacuum tubes brought within their sphere of influence. At the close of his lecture Mr. Tesla remarked: "It is hoped that the study of these phenomena and the perfection of the means for obtaining rapidly alternating high potentials will lead to the production of an efficient illuminant."

ALIGHTING FROM TRAMCARS IN MOTION.

Among the latest American inventions is one whereby passengers may alight from a train without the latter stopping, or even hesitating. The characteristic feature of the invention consists in the employment of a number of "saddle cars," which are successively taken up and dropped from the moving train, and through the medium of which passengers may enter or leave a train without interrupting its movement.

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The late Mr. Cecil Rhodes.

Cecil Rhodes, whom Mr. Stead styled "the one strong man of our empire" is no more. His one great idea was the extension of the British Empire wherever possible. It is stated that he was an agnostic and early in life he was nurtured in the doctrine of evolution. Believing in the theory of the survival of the fittest, he seems to have felt that the British empire alone was destined to survive in the competition of nations and that every step should be taken towards the consummation of that ideal. His "political bequest" which has been published recently by Mr. Stead bears testimony to the largeness of the mission which Mr. Rhodes had in view. In a document written as far back as 1890 Mr. Rhodes stated that his ideal of the political future was that the world should pass completely under the control of a combination of all the English-speaking peoples. This he thought would ensure the maintenance of peace to all eternity. Mr. Rhodes also expressed the hope that Great Britain and the United States might eventually become one united people. The magnificent bequests he has left is evidence of his ardent desire to unite England, Germany and America. Besides a large donation to the Oriel College, Oxford, the institution in which he studied, the late Mr. Rhodes' bequests include scholarships to the extent of two millions sterling; 24 scholarships for South Africa, 22 for America and 15 for Germany. His will explains the motive of the policy which guided him throughout his life. Speaking of himself, he is said to have observed: "I saw that expansion was everything, and that the world's surface being limited, the great object of present humanity should be to take as much of the world as it possibly could." "If there be a God," said Mr. Rhodes, for he was an agnostic, "I think that what He would like me to do is to paint as much of the ways of Africa British-red as possible and to do what I can to promote the unity and extend the influence of

the English-speaking race, for He is manifestly fashioning the English speaking race as the chosen instrument by which He will bring in a state of society based upon Justice, Liberty and Peace."

He has been constantly heard to say—pointing to the map of Africa, and sweeping his hand from the Cape to the Zambesi,—“That is my dream—all English.” For the realisation of his cherished object, Mr. Rhodes spared no efforts, and, sorry to say, often spared no scruples. His complicity in the Jameson raid certainly reflects on his character. It is a question which posterity alone will settle whether Mr. Rhodes' work for the Empire has been an unmixed blessing, but whatever may be the criticism which men may pass on his character still the severest critic must absolve Mr. Rhodes from any idea of self in all his actions. The good and the greatness of the British Empire was his sole object. Clive and Warren Hastings did not scruple to adopt questionable methods when they laid the foundations of the British Empire in India and they tarnished their name and fame by unscrupulous attempts to enrich themselves. No such accusation could be brought forward against the late Mr. Rhodes. To-day the Britisher who is proud of his empire in India does not like to be reminded of the methods pursued in the conquest of the country, but points with pride to the beneficent work of his countrymen in the land. May we hope that, if the late Mr. Rhodes' dream of a "United South Africa" be realised, England will so govern its people as to justify Mr. Rhodes' claim that God has "manifestly fashioned the English-speaking race, as the chosen instrument by which He will bring in a state of society based upon Justice, Liberty and Peace."

The London correspondent of a contemporary assures us that there is every likelihood of the election of Mr. Dadabhai Naoroji as the parliamentary candidate for North Lambeth. According to the result of a recent meeting of the Liberal and Radical Association for North Lambeth, Mr. Dadabhai received the unstinted support of the majority against his rival candidate a Mr. Whiteman.

The Hon. Mr. Gokhale on Indian Finance.

The boldest attack on the financial policy of the Government of India was made by the youngest member of the Viceroy's Council in a remarkably lucid and argumentative speech. We recommend to our readers a careful study of the able criticism of the Hon. Prof. Gokhale on the Financial statement presented by the Hon. Sir Edward Law. Mr. Gokhale declared that he could not conscientiously join in the congratulations which had been offered to the Finance Minister for his having evolved a surplus of seven crores. On the other hand, the surplus coming as it does on the top of a series of similar surpluses, realized when the country has been admittedly passing through very trying times, illustrates in a painfully clear manner the utter absence of a due correspondence between the condition of the people and the condition of the finances of the country. "They are a wrong in the first instance," observed Mr. Gokhale, "in that they exist at all—that Government should take so much more from the people than is needed in times of serious depression and suffering; and they are also a wrong, because they lend themselves to easy misinterpretation, and, among other things, render possible the phenomenal optimism of the Secretary of State for India, who seems to imagine that all is for the best in this best of lands. A slight examination of these surpluses suffices to show that they are mainly, almost entirely, currency surpluses resulting from the fact that Government still maintain the same high level of taxation which they considered to be necessary to secure financial equilibrium when the rupee stood at its lowest."

Mr. Gokhale pointed out the injustice of maintaining taxation at the same high level when the rupee stands at 16d as was thought to be necessary when it stood at 13d. He quoted statistics to show that the total argumentation of public burdens during the past 10 years came to over 15 crores.

On the question of the material prosperity of the

people Mr. Gokhale pressed his views with much force. Lord George Hamilton and Lord Curzon have been urging that there has been a distinct advance for the better. Mr. Gokhale denies this:—

"We, who live in the midst of the hard actualities of a hard situation, feel that any such comforting views of the condition of the Indian people are without warrant in the facts of the case, and we deem it our duty to urge, on behalf of the struggling masses, no less than the interests of good administration that this act of a deep and deepening poverty in the country should be frankly recognized, so that the energies of the Government might be directed towards undertaking remedial measures."

Mr. Gokhale presented a series of statistics relating to (1) census returns; (2) vital statistics; (3) salt consumption; (4) the agricultural outturn of the last 16 years; (5) cropped area in British India; (6) area under certain superior crops and (7) exports and imports of certain commodities, and established the following propositions—(1) That the growth of population in the last decade has been much less than what it should have been, and that in some Provinces there has been an actual decline in the population. (2) That the death rate per mile has been steadily rising since 1884, which points to a steadily increasing number of the people being underfed. (3) The consumption of salt, which already in this country is below the standard required for healthy existence, has not kept pace with even this meagre growth of population. (4) That the last decade has been a period of severe agricultural depression all over India. (5) That the net cropped area is diminishing in old Provinces. (6) That the area under superior crops is showing a regrettable diminution. (7) The export and import figures tell the same tale, viz., that the cultivation of superior crops is diminishing. Cattle are perishing in large numbers.

There are several other points in Mr. Gokhale's speech which we are unable to refer to for want of space. We content ourselves with expressing the hope that the country may be spared long the services of this patriotic and self-sacrificing young Brahmin who has established his reputation as a clever and careful student of Indian finance.

A Defence of Higher Education.

It has become the fashion nowadays to decry higher education in India. A section of anglo-Indians who view with disfavour the growing political aspirations of educated natives and their laudable desire to have a larger share in the administration of the country cry down graduates and ascribe to higher education all the evils conjured up by their imagination. Some years ago, Sir Lepel Griffin described the present system of education "as most jejune, lifeless and inefficient" and since then similar criticisms have been passed by several others. Only the other day Mr. F. H. Skrine, a retired Bengal civilian, in the course of a paper before the Society of Arts, London, condemned our educational system in strong terms. He was unkind enough to suggest "the hosts (educated Indians) which have drawn blanks in the lottery of life, make their voices heard in the Press, and it is needless to add that they are not given to the Government, whom they regard as a cruel step-mother."

Such criticisms are made constantly, and there is no doubt that of late even the Government of India has displayed a deplorable tendency to cut down grants for higher education under cover of allotting them to primary education. The defence of higher education which the Hon. Dewan Bahadur S. Srinivasa Raghava Aiyangar made recently in his Convocation address to the graduates of the Madras University was therefore very timely. He is one of the oldest graduates of our University, has risen from the lowest rung of the official ladder to a high office under the government, and has won the appreciation of all for his career as Dewan of Baroda. He has never been known to take extreme views on anything and his loyalty, sobriety and moderation have always won for him the approbation of the Government. It is to be hoped, therefore, that his powerful and emphatic protest against the unfavorable criticisms that are being constantly passed on higher education will carry force

with the authorities. In the course of his thoughtful address to the graduates, Mr. Srinivasa Aiyangar observed "in the first half of the last century when the administration of the country in the several branches was re-organised, according to English principles and methods, it was of great importance to create a class of men versed in English science and literature and imbued with English principles of good Government and fair and impartial administration of law and justice to assist the European officers in the administration of the country. The introduction of higher education in India was at first directed towards supplying this want. This object has been satisfactorily attained. There has been a distinct improvement in the native official agency, both in point of moral tone and efficiency, and the improvement is progressive. At first there was a tendency on the part of some of the higher European officers to look askance at graduates as likely to be unpractical and useless with more wind in their heads than solid knowledge or acquirements. Graduates have now lived down this prejudice and shown that they are capable of discharging the duties entrusted to them with fidelity, diligence, and intelligence. As judicial officers the excellence of the work done by them has been acknowledged by authorities who can speak with a competent knowledge of the subject; and in the Executive Departments, they are proving themselves to be increasingly efficient in all the spheres of activity open to them."

We often hear the complaint that the Government service, as well as the learned professions—Law, Medicine, and Engineering—is already overstocked with graduates, and that matters have come to such a pass that the turning out of any more graduates who cannot find employment in the Government service would be an evil. On this point Mr. Srinivasa Raghava Aiyangar observed,

"The rush of educated men to the Government service was but natural. In all countries, not excepting even England, where the political and industrial activities of

the most varied description limit the sphere and dwarf the importance of the official classes, the Government service offers considerable attractions; but in a country like India where there is no political life worth the name apart from official life, and where avenues of employment in other directions are practically absent, the Church and the Army being shut out, and manufactures according to modern methods being very imperfectly developed, the pressure of the educated classes on Government service must naturally be expected to be severe."

It might be remembered that one of the former Governors of Madras, Lord Wenlock, from the same University platform altogether denied that there was any ground for the contention that the number of highly educated youths was far ahead of the requirements of the country, and that the present policy only resulted in a body of dissatisfied persons unable to find a suitable opening in life under the conditions of the country, and that higher education was advancing faster than was compatible with the general progress of the people. Lord Wenlock quoted statistics to prove that what is required is to bring primary education up into its proper place in the scale and not in any way to restrict the progress of higher education.

"If education is to be the test of the progress of a nation in civilisation, it appears to me that to reduce the number of those receiving higher education is not the best way of attaining that object considering that at present only 16 of the male school-going population is receiving University Education."

Lord Wenlock also pointed out by reference to statistics that, even at from the low stand-point of regarding higher education as a means solely of providing suitable men for the public service, it was wrong to say that it was being overdone.

Dr. Duncan, our late Director of Public Instruction, also protested against the tendency to crydown higher education and we may in this connection draw attention to the testimony borne by the Hon. Mr. Giles, Director of Public Instruction, Bombay, to the good results of higher education in India. In concluding his evidence before the Indian University Commission which recently held its sittings in Bombay, Mr. Giles, said:—

"Finally, I wish to place on record my opinion that while there is great room for reform in connection with

this University, the University has done and is doing valuable work and is producing men who are not only occasionally brilliant scholars, but who are, on the whole, fairly well-educated, well-mannered and well-conducted. My experience after 29 years is that our graduates are generally men who are fit to be public servants, and to take their place in the various walks of life, that the tendency in the Colleges and in the students is towards improvement, and that the University of Bombay is not behind any other University in India either in the efficiency of its management or in the sufficiency of its results."

Mr. Fraser on Local Self-Government.

All true well-wishers of local self-government in India will be interested to read the recent address of the Hon. Mr. Fraser, the Chief Commissioner of the Central Provinces, at Warda. Mr. Fraser says that the main objects of the scheme of local self-government are two *via*. (1) the political education of the people and (2) the more efficient administration of District Funds. The realisation of these objects depends very largely upon the free and intelligent co-operation of the general public with one another and with the representatives of the government. The lessons he wishes to enforce are two. The first is that the officers of government and the local bodies must co-operate, which is the very essence of the local self-government scheme. Its advantages are obvious; but apart from this, it is prescribed by the law, and the law must be obeyed. The second lesson which he wishes to enforce is the necessity for utilising the services of capable and willing non-officials. The chairman and officers of the Council should enlist the co-operation of the members of that body and of the Local Boards. More than this, the supervision and control of local officers is an essential part of the law and their kindly advice and assistance are an essential element of success. Public-spirited members of municipalities should try to cultivate cordial relations with them.

Those that have not paid their subscriptions for the current year are requested to make an early remittance. If so desired the next number will be sent by V.P.P.

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THE CHURCH AND SOCIAL PROBLEMS.

HERE can be no doubt that, at the present time, we are faced by many problems of ever-increasing seriousness. No one who is familiar with the general tone of current literature can be unaware that there is a widespread sense of uneasiness in many minds. The Press of the day has recently been full of severe animadversions on the deficiencies of our Governmental departments, and of our whole military and naval administration. There has been much criticism of what is regarded as the supineness and *laissez-faire* of our people in general. Books have been written to demonstrate that our commercial supremacy is shaken, and that other nations, by showing more energy and alertness in trade, have seriously encroached upon the sources of our national prosperity. In almost every department of literature and public life, our greatest orators, poets, historians, statesmen, divines and men of action have passed away, and have left no successors comparable to them in ability and force. There is an abnormal devotion to every form of mere amusement both in the higher and poorer classes. The love of money was never, perhaps, more universal or more intense. There is a growing neglect of Sunday observance, and a growing indifference to the services of the church. The faith of multitudes has been seriously shaken and, in many thousands of bewildered minds, resembles a house built upon the sands. It has been calculated that not five per cent. of the working classes attend our churches, and thousands in our great cities are never brought into direct and personal contact with the great truths of religion.

There may be another side to all these questions, and I am very far indeed from desiring to encourage a spirit of pessimism. Still there is a general misgiving apparent in every direction, that we are drawing near to a period of crisis in our national history. An intense hatred of England,

a constant misrepresentation of all our doings, a never-ceasing stream of venomous calumny against us is an obvious phenomenon of the continental press. The multiplicity of interests involved in our vast empire, and the constant possibility of collision with the aims and interests of other nations, might, almost at any time, bring about a European combination against us which might possibly shake to the dust the fabric of our supremacy. Amid all these circumstances one thing at least is certain: it is that we should give most serious consideration to the condition of things around us both at home and in the world; and in any reformation that may be needed the Church of God ought to take not only a conspicuous but the foremost part.

Now, instead of entering into endless details, I wish to lay down one broad, indubitable principle which is that the Church should dwell far more forcibly and uniformly than it does on the great truth that the chief object in man's life is to show his love to God by devoting himself to the highest good of his neighbour. The one supreme rule of all our lives should be that every man should never do less than his utmost, or be less than his best: and that this utmost and this best should be strenuously devoted in the service of God to the benefit of man. And yet in all our religious writings how seldom we see the enforcement of this divine and supremely necessary duty! Our religious periodicals and our religious literature are full of disputes about matters which, by comparison, are miserably unimportant. Details of theological shibboleths, mere nullities of petty ceremonial, the revival of dead, ignorant and baseless mediæval superstitions together with petty disputes about the minutiae of ritual, embitter the partisanship of rival theorists; and in the midst of these wretched disputations, the vast work of the Church is grievously impeded by uncharitable and sectarian wranglings. The religion of the Christ will never resume its full and mighty sway until all the Churches of Christendom, and all the parties in

our own divided church, unite in one mighty and strenuous endeavour to uplift and ameliorate the minds of all living Christians into a sense of their corporate and spiritual duty.

It is at any rate certain that this is the unmis- takable teaching of all that is greatest and best in the Bible. The indignant prophets reiterated in tones of thunder that all the rites and sacrifices of all Levitism were intrinsically null and void compared with one single act of genuine altruism. "Thou desirest not sacrifice else would I give it Thee," says the Psalmist. "To what purpose is the multitude of your sacrifices unto me? saith the Lord," is the message of Isaiah. "He hath shown thee, O man, what is good," says Micah, "and what doth the Lord require of thee but to do justly, to love mercy, and to walk humbly with thy God." "Behold," said Samuel, "to obey is better than sacrifice, and to hearken than the fat of rams." Such utterances might be indefinitely multiplied; but it should be sufficient to quote the words of the prophet Hosea: "For I desired mercy and not sacrifice, and the knowledge of God more than burnt offerings"—for those words twice received the emphatic approval of our Lord Himself, and indeed they are the constant lesson of the entire New Testament.

My object then in this paper will be to show that the Church will never do her duty or remedy the wrongs of the world, until, with all her ardour and all her energy, she enforces this lesson on the minds of all, and illustrates it by the daily conduct of all her true and faithful workers.

We are what God made us. Every man is as great as he is in God's sight and no greater. Commonplace? Why, half the strength and glory of humanity depends upon the commonplace. But granting to the full that we cannot do much in the sphere of those spirits which are more finely touched than ourselves to finer issues, let us turn to other regions of effort, in which men, following out Christ's example,—not pleasing themselves, have pleased their neighbours, for their good unto

edification. Think of the Reformers: how, in their sovereign devotion to the truth, they faced a lying world and corrupted Churches, and, not holding their lives dear to themselves, stood like Huss and Luther before kings and priests and were not ashamed. Think how they proved by their lives, and by their glad willing deaths, that,

Truth, crushed to earth, shall rise again.
The eternal years of God are hers;
But error, wounded, writhes in pain
And dies amid her worshippers.

Think of the Philanthropists:—of St. Vincent de Paul, calling into activity his missionaries, and opening for womanhood so sweet an achievement in his sisterhoods of charity; of Howard, visiting all Europe, not to survey the sumptuousness of palaces or the stateliness of temples, but to survey the mansions of sorrow, and take the gauge of depression and contempt;—of Lord Shaftesbury, taking up the cause of the children in the factories, and the women in the mines, and the little ragged waifs and strays in the densely crowded streets;—of William Lloyd Garrison, a boy in a garret, living on bread and water, with only one black lad to help him at his printing press, setting himself the colossal task of proving to twenty millions of his countrymen that they were horribly in the wrong with their immemorial slave trade; think of him denounced by society, lowered at by the whole nominal Church, the dagger of the assassin flashing daily about his path, yet living to achieve his mighty purpose, turning those icebergs all around him into flame, until the very hand which, almost in boyhood, had formulated the demand of righteousness, inscribed it in declining years upon the statute book of a regenerated land. Or think, once again of the great beloved Missionaries:—poor hectic, consumptive Brainerd, among his Red Indians; poor worn Adoniram Judson in his Burmese prison; poor William Carey the, "consecrated cobbler" of Sydney Smith's unhallowed wit; plain John Williams, the martyr of Erromango; Reynard, working with his laughing, shivering little boy in the intense

frost up the Fraser River at Cariboo. Scarcely one of these servants of the Most High God was great as man counts greatness. They were, as we are, commonplace, had they not done, as so few of us even try to do, redeemed their commonplace by the genius of simple goodness. For all earth's laurels shall wither before their amaranths, and for them, ten thousandfold more than for earth's inch-high dignitaries, "all the trumpets shall sound on the other side." John Howard was a plain country gentleman, who could barely write a sentence of English. "I am a plodder," he used to say, "who goes about to collect materials for men of genius to use." Portraits shew us the broad, homely, bourgeois features of Vincent de Paul, and the middle class mediocrity of Lloyd Garrison. The bright young martyr Bishop Hannington could only take a poor degree at a small Oxford College; and William Carey could never so much as make one pair of shoes which fitted properly. What they did we certainly in our measure can do. You say we have had no call to leave home and wander on these high missions. Be it so; let us stay at home humbly recognising that we are far unworthy to take our seats amid this autocracy of spiritual nobleness. Yet if we are faithful the call may come to us. It is an unknown Eastern monk; he springs into the arena; he thrusts himself between the gladiators; he is martyred amid the yells of the populace, yet the gladiatorial games cease for ever, and St. Telemachus has bought his eternity with a little hour. It is a poor Russian slave—on the track of his master and his children the wolves howl in the snow; he springs out amid the yelling pack, and is torn in pieces, and his master's children are saved, and his deed thrills through the world. It is a young humble, ungifted Belgian priest, who goes to die a leper among the hapless lepers of the Pacific Isle, and the world cares more for him than for Emperors. It is the pilot on Lake Eyrie in the burning ship; but he will cling on to the tiller, and the steamer shall be safely steered to the

jetty, though he drop a blackened corpse,—and Christ will not turn his back on a man who died for men. It is Annie Ayres, the poor little maid of all work:—the house is in flames, the rooms are filled with blinding suffocating smoke, but at all costs she will save that last child. She does save it, and is killed, and the poor East End slavey has laid at the haughty Palace gate of Humanity a service and an example worth cartloads of diamonds and the lives of thousands of selfish and arrogant grandees. Can we do nothing? Is love for our neighbour nothing? Is example nothing? Is unselfishness nothing? Is sympathy nothing? Are kind words nothing though they cost so little? Is a care for the generations which shall come after us nothing? Were we sent into the world only for the small selfishness of domestic interest, as though it were enough for us to be safe on our petty islet though myriads were perishing round us in the weltering of the brine immeasurable sea? Be it so that very few eyes shall be wet for us, and not for long, while others, with even less opportunity, have clothed, nations in spontaneous mourning, and gone down the grave among the benedictions of the poor. Still can we do nothing? Can we not give to good objects with large motives? Can we not strive constantly to rise out of self-complacency into humbleness, out of egotism into service, out of coldness into love? Even in this small way we shall not miss our blessing; for all goodness is incalculably diffusive. "The growing good of the world," it has been said, "is dependent partly, on unhistoric acts; and that things are not so ill with you and me as they might have been, is half owing to the number who lived faithfully a hidden life, and rest in unvisited tombs." So it be true service; so it be unselfish service; so it be the best service which it is in our power to render,

All service ranks the same with God,
With God—whose puppets best or worst
Are we—there is no last or first.
Small service is true service while it lasts.
The daisy by the shadow which it casts,
Protects the lingering dewdrop from the sun.

In this paper, I have purposely dwelt not upon details, but upon the one broad general principle which ought—much more powerfully than it does,—to influence the entire work and teaching of the Church of England, and indeed of the whole church of God. If this principle be once fully and adequately recognised we should rapidly see a removal of the worst social evils which exist among us, and indeed an amelioration of the entire condition of the world.

F. W. FARRAR.

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THE BACON-SHAKESPEARE THEORY.

AS we are threatened with a revival of the Bacon-Shakespeare controversy, it will be of interest and importance to cite the principal reasons, or many of the principal reasons at least why Englishmen will never cease to believe that the Plays of William Shakespeare were written by William Shakespeare. It will be convenient to adduce these reasons in consecutive order, and afterwards to deal with the Baconian theory.

1. The man Shakespeare was personally and intimately known to many of his distinguished contemporaries. Amongst these friends and acquaintances were Ben Jonson, Robert Greene, Francis Meres, Henry Chettle, James and Richard Burbadge (George Peele, Heminge and Condell (the editors of the First Folio), Michael Drayton, the Earls of Pembroke and Montgomery and James I. Let it be particularly noted with regard to these names that the Burbadges and Peele were partners with Shakespeare in the Black friars theatre, and were constantly in the habit of meeting with him and seeing his manuscripts. Drayton, who knew Shakespeare well, was, like the great dramatist himself, a Warwickshire man. The earls of Pembroke and Montgomery not only regarded Shakespeare with favour personally, but took a deep interest in his plays as they were successively produced; and as touching James I. there was for a longtime in existence "an amicable letter to Mr. Shakespeare" which that royal patron of learning was pleased to write with his own hand. All the individuals above mentioned, and many others whose names could be given, knew Shakespeare well, and knew that he was the writer of the plays which bore his name.

2. Is there any learning displayed in Shakespeare's plays which was beyond the reach of the man himself? Certainly not. He had the same sources within his reach that Bacon would have

had. The English historical plays were chiefly taken, from Holinshed's *Chronicle*, which also furnished him with the skeleton plot for his magnificent and transcendent tragedy of *Macbeth*. In his Roman subjects the dramatist was indebted to North's translation of Plutarch's *Lives*; and for the plots of many of his other comedies and tragedies he went to Italian and other sources through a French medium, for Shakespeare was unquestionably expert in the French language, though he knew "little Latin and less Greek" compared with the learned Ben Jonson. But the fact is, Shakespeare took his dry bones wherever he could find them, and invested them with a wonderful vitality. Only a few weeks ago, I found in Mateo-Aleman's famous novel *the Spanish rogue Guzman de Alfarache*, published in 1599, a passage which suggested to Shakespeare his noble apostrophe in *Hamlet* beginning "What a piece of work is man?"

3. Were the imagination, the wit, the sublimity, and the intellectual greatness manifest in the plays, such as were out of the range and capacity of Shakespeare as known to his contemporaries? Unquestionably not. The evidence on this point is overwhelming and conclusive. Francis Meres, one of the most learned men of his time, and a Master of Arts both of Oxford and Cambridge, wrote of Shakespeare in *The Wits Commonwealth*. "As Plautus and Seneca are accounted the best for comedy and tragedy among the Latins; so Shakespeare among the English is the most excellent in both kinds for the stage." He gave him rank with Homer, Aeschylus, Aristophanes, Virgil, Ovid, and Horace; and not a single contemporary author traversed, his judgment, when he said "the Muses would speak with Shakespeare's fine-filed phrase, if they could speak English." Thomas Heywood endorsed the estimate of Meres and in his *Hierarchy of Blessed Angels* spoke of the great dramatist in terms of stronger praise than he applied to any of his contemporaries. Spenser's *Teares of*

the *Muses* shows what a high estimate that great poet had formed of Shakespeare even from his earliest writings. Ben Jonson observed of the dramatist that "he was not of an age but for all time" and no eulogy could surpass this. In his *Discoveries* Jonson again says of Shakespeare "I loved the man and do honour to his memory, on this side idolatry, as much as any. He was indeed honest, and of an open and free nature; had an excellent phantasy; brave notions and gentle expressions wherein he followed with that facility that sometimes it was necessary that he should be stopped." Greene jealous of Shakespeare's growing fame, unwittingly paid striking tribute to him in this bitterly querulous passage in his *Groat's Worth of Wit*. "There is an upstart crow beautified in our feathers, that with his tiger's heart wrapped in a player's hide, supposes he is as well able to bombast out a blank verse as the best of you; and being an absolute *Johannes Factotum*, is in his own conceit, the only Shake-scene in this country." Heminge and Condell, in their preface to the First Folio, said, "His mind and hand went together; and what he thought he uttered with that easiness, that we have scarce received from him a blot in his papers. As he was a happy imitator of nature, he was a most gentle-expresser of it." Drayton speaks highly of Shakespeare's comic vein, and of the strong conceptions of his natural brain. Barnfield spoke of his "honey-flowing vein"; Bancroft said he "so shook his speare as to startle other poets;" and, Sir John Davies held that "he was either fit companion for a King, or to be a King himself among the meaner sort." Such were the estimates of actual contemporaries; and the great men immediately following held equally lofty views respecting the dramatist. Quaint Thomas Fuller said "I should think I were guilty of an injury beyond pardon to his memory should I so far disparage it, as to bring his wit in competition with any of our age." At the Mermaid Club, founded by Sir Walter Raleigh wit contests were carried on be-

tween Shakespeare, Ben Jonson, Beaumont and Fletcher, and others. Fuller says of these, "many were the wit combats between Shakespeare and Ben Jonson, which two I behold like a Spanish great galleon and an English man-of-war: Master Jonson like the former was built far higher in learning; solid but slow in his performances. Shakespeare with the English man-of-war, lesser in bulk, but lighter in sailing, could turn with all tides, tack about to take advantage of all winds, by the quickness of his wit and invention." Only fifteen years after the death of Shakespeare, Milton wrote his noble sonnet, beginning "What needs my Shakespeare for his honour'd bones." Such a consensus of testimony as that cited above entirely disposes of Mr. Mallock's contention that Shakespeare was "a notoriously ill-educated actor, who seems to have found some difficulty in signing his own name." It also demonstrates the absurdity of Mr. Theobald's statement "that while Bacon's reputation was large and world-wide, Shakespeare's was non-existent." Both statements are as far from the actual facts as they can possibly be.

4. That Bacon's reputation was *wider* during his lifetime than Shakespeare's may be conceded, but there are special reasons for this. Bacon was one of the foremost men of the time in a public sense. As a statesman and a Lord Chancellor, whose name was continually in men's mouths, his fame travelled abroad. Shakespeare, on the contrary, was only known to Englishmen generally as a poor player, and the estimation in which actors were held was very low indeed. Those who knew his writings, the men whose opinions we have quoted, perceived his greatness, as all the world, perceives it to-day. But in the public eye of his day he necessarily occupied but little space. Yet, wherever the knowledge of his works really penetrated the highest tributes were paid to them.

5. Mr. Theobald and others have made much of the point that when Louis XIV. instructed Mr. Cominges, his Ambassador in London, to send him an account of what was worth notice in England,

the Ambassador informed his royal master that the literary glory of England "consisted only in the Writings of Sir Thomas More, Lord Bacon, Buchanan, and a living person of the name of Milton." The Ambassador seems to have been almost as ignorant of English literature as the Baconians themselves; for, be it noted that not only is Shakespeare not mentioned in this list, but Ben Jonson, Beaumont and Fletcher, Christopher Marlowe, George Chapman, Edmund Spenser, Sir Walter Raleigh, Sir Thomas Browne, Michael Drayton, Samuel. Daniel, and many others, have no place in the list. The Ambassador's opinion was therefore valueless, both as regards Shakespeare and English literature generally. He had probably chanced to hear three or four names mentioned in court circles, and taken them to be exhaustive of all the great contemporary writers.

6. The reason why we do not hear so much of Shakespeare for a century after his death as might have been expected from his surprising genius, is that his fame was of slow growth amongst the people generally. His transcendent merits were recognised by his contemporaries, and by all choice spirits like John Milton in succeeding generations; but his reputation only became completely national in the eighteenth century, and completely world-wide in the first half of the nineteenth. Hence we find the Rev. John Ward, Vicar of Stratford-on-Avon, asking in his *Diary* under date of 1662. "Whether Dr. Heylin does well, in reckoning up the dramatic poets which have been famous in England, to omit Shakespeare?" I also find with regard to Langbaine's *Dramatic Poets*, published in 1691, that while the compiler pays the highest tribute to the genius of Shakespeare, so unable is he to appreciate the just proportion of things that he devotes only 17 pages to Shakespeare while he gives 47 to Dryden. He further gives only 3 pages to Marlowe but 10 to Sir William Davenant. It took a generation or two to rectify these inequalities.

7. The Baconians have asked how it is that while Shakespeare has named some hundreds of places in his plays, he has never mentioned Stratford-on-Avon. The answer is that he has not named it for the same reason that he has not named a thousand other places because it was not associated with any historic events. But if there is anything in such an argument as this, it is unfortunate for the Baconians, as there are scattered through the plays various Warwickshire sayings and allusions and we know that Bacon was born in London, and never was in Warwickshire.

8. The Folio Edition of 1623 contains a portrait of the dramatist with Ben Jonson's verses upon the likeness, which "was for gentle Shakespeare cut." Any one who carefully studies this portrait and the accredited bust at Stratford, will there find evidences of a brain that could well be the creator of the plays.

9. The date of the last play, associated wholly with Shakespeare's name, Henry VIII, is 1613. The dramatist died in 1616, and no Shakespearean plays appeared after that date, Shakespeare of course not being alive to write them.

10. The first Shakespeare folio was published in 1623. It was a great event in literature. Bacon was living at the time, and lived for three years afterwards. We are requested to believe that he saw his writings collected under another name, and that he acquiesced in the immortality which was bound to accrue to the accredited author of these great dramas. The thing is monstrous on the face of it, and it is still more incredible in view of the preface by the Editors, if Bacon was the real author.

11. In this first Folio the editors published for the first time no fewer than sixteen plays from the original manuscripts of William Shakespeare. They had carefully preserved these plays from destruction, and they now first saw the light.

12. No authority upon Bacon has ever accepted the theory that he was the author of Shakespeare's plays. Mr. James Spedding, a life student

of Bacon, and the greatest of all Baconian authorities, knew of this absurd theory and rejected it. Yet Mr. Spedding was one of the first to discover a joint authorship in some of Shakespeare's plays. As he did this, and would have been one of the first to put forward the claims of Bacon if there had been anything in them, there could not well be more conclusive evidence of the baselessness of the theory.

What is there to set against all the foregoing mass of evidence? Nothing but an idea and a conjecture.

1. The idea that Bacon was the author of the plays was first formulated in print but not originated, by an American lady, Miss Delia Bacon. She claimed that her illustrious Elizabethan namesake was the actual writer of Shakespeare's plays. Unfortunately, Miss Bacon's intellect was so unsound that she was eventually placed in an asylum. But her idea was adopted and elaborated by Judge Nathaniel Holmes, Mrs. H. Pott, Dr. Owen and Mrs. Gallup, Bacon being given a wider field even than Delia Bacon had given him.

2. In 1887 Mr. Ignatius Donnelly published a work, *The Great Cryptogram*, in which he announced that he had discovered a cypher which proved that Bacon was the author of the plays attributed to Shakespeare. The cypher consisted of blunders in pagination, hyphenation, and bracketing in the Folio edition of 1623. But even with the aid of these blunders, nothing can be done unless the word Bacon itself is capitalised even in such compounds as *bacon-fed*, whilst italics must also be called into requisition. This mere statement of the cypher is enough to demonstrate its absurdity. We are asked to believe that Francis Bacon wished in future ages to be known as the author of Shakespeare's plays, but that the only step he took to ensure this was by burying a cypher in one of the plays. Chance was to discover which of the plays it was, and an ingenuity allied to idiocy was to find a letter here

and a letter there by multiplications in which there was no method whatsoever. By similar twistings and contortions of language, it would be easy to prove that the plays were written by Julius Cæsar or Oliver Cromwell.

3. But the Bankside edition of the works of Shakespeare completely destroys the Donnelly Hypothesis in another way. It prints the earliest Shakespeare text side by side with the 1623 text, showing at a glance the changes which the plays underwent during their first stage-life at the hands of literary pirates, stage censors, and careless printers - thus rendering it at once apparent that in neither text could a cypher be found today by an exact mathematical process, even had one been originally concealed therein.

4. Mr. Mallock seems to have continued the Baconian theory, and to have added to it considerably. According to him Bacon amused himself by burying cyphers in the works of other great writers besides Shakespeare; and it seems he carried the objectionable practice so far as to send his ghost two years after his death to claim the authorship of Burton's *Anatomy of Melancholy*. If Mr. Mallock has only taken up the theories of Dr. Owen and others in order to reduce them to an absurdity, he has effectually accomplished his purpose. The negation of argument could not possibly go further than the ascription of the works of Spenser, Burton, Greene as well as those of Shakespeare, to Bacon. It now only remains for some ingenious person to discover a cypher in Bacon himself, showing that the works usually attributed to Francis Bacon were really written by George Chapman.

5. From the time that Bacon entered upon public life in 1584 until shortly before his death, his labours were greater, and his whole career fuller, than those of any of his contemporaries. The marvel, is that in addition to his legal and legislative work he could have written those works which are confessedly his. But that he could add to them such a bulk of literary work as the plays of

Shakespeare is as monstrously incredible as it was physically impossible. This is to say nothing of the works of other authors also now claimed for him.

6. The Baconians make much of the point that Shakespeare wrote many historical plays but not one on Henry VII. that subject being taken up by Bacon. Shakespeare has given a graphic sketch of Henry VII. in the closing scenes of Richard III. and described his dramatic rise to the throne. The rest of his career may not have seemed promising enough to the dramatist for a separate play or he had not the opportunity of undertaking it. As for Bacon taking up Henry VII, what could be more natural, when he specially appealed to him as the patron of learning, and the "Solomon of his time." As Shakespeare had put many of the other Kings upon his canvas, this was an additional reason why Bacon should take a subject that was fresh; and this is really an argument in favour of Shakespeareans and not of Baconians.

7. We absolutely refuse to believe that Shakespeare was a knave and Bacon a fool. If Shakespeare was not the author of these plays, then he was a living lie amongst all his friends and before the public. And it is equally impossible to believe that Bacon was such a fool as to cast his dramatic bread upon the waters, hoping to find it again, accidentally, after the lapse of centuries, at the hands of an enterprising American lawyer. The Baconian theory implies a collusion between Bacon and Shakespeare, between Shakespeare and all those wits and managers to whom he was no doubt in the habit of reading portions of his plays and collusion of an utterly impossible kind between Bacon and the editors of the First Folio. The collusion must have been going on from the time that Shakespeare began writing his plays until his death. The whole thing is both incredible and impossible, and the rankest midsummer madness.

Finally, the Shakespeare whom the world loves

is not the Shakespeare of historic incident or learning. That part of him which is the greatest and most enduring could not have been written by a man like Bacon. The soul of Shakespeare is of a different order. He is of imagination all compact. The genius taught by nature is greater than the genius taught by books. The brain of Shakespeare seems to have been the one human brain touched to the finest issues in all its parts, many men have excelled in one thing, but he was universal. This is his great glory. Although his achievements are marvellous, they are not impossible—that is, to Shakespeare. The greatest genius in all ranks of life has been the genius untaught and unmoulded by rules or by learning. It was so in the case of Robert Burns; and in numberless other instances which could be cited. Shakespeare—not Bacon nor another is the great national genius of England, and can never be dethroned. So long as there remains one human soul which can thrill beneath the magic of his touch, or vibrate responsively to those chords of emotion upon which he so skilfully played; so long as children put forth the tender leaves of innocence and hope; so long as woman makes paradise in the world by her love and devotion; so long as man fearlessly aspires and daringly achieves renown in a hundred fields, so long as Nature herself continues to throw her mantle of beauty over the earth, yea, even until the great globe itself and all which it inherit shall dissolve, so long shall the writings of William Shakespeare continue to be the most priceless treasure, as they are the chiefest glory, of our noble English literature.

G. BARNETT SMITH.

Shakespeare's *Macbeth* & the Ruin of Souls.

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RELIGIOUS EDUCATION IN INDIAN SCHOOLS.

IN Modern India, all forms of organised public activity are apt to be spasmodic. While the great masses of the people run their predestined course of struggle for daily bread according to the opportunities available to them from time to time and then turn their thoughts heavenward in contented and silent resignation during the intervals of rest from toil and trouble, some highly educated men who enjoy office, emoluments, comfort and leisure seek out a hundred opportunities for making a stir in the minds of the few who are akin to them in tastes, pursuits and aims. The leaders as well as the rank and file of this cultured minority of Indian Society create but very little impression on the immense population around them on whose behalf they work and for whom they speak. As the people concern themselves but little with their views or activities in regard to public needs and wishes and as in most cases their views and feelings find expression in a language unknown to the millions, they produce little or no effect on the practical life of Society at large, or any section of it. Hence there is little of real vitality in the movements set on foot for the formation and expression of public opinion or for the achievement of social progress and unity.

While, in our view, these observations apply more or less to all forms of organised public activity in India, we have to point out that, in regard to the agitation for the introduction of religious instruction in the schools and colleges maintained or aided by the state in this country, there is also a great deal of unreality, though arising from very different causes, as we proceed to show. The cry for religious education is founded on the vague impression existing in the minds of some educated Hindus that thereby they can put an end both to Christian Conversions like those we occasionally read about, and also to the tendency,—now so frequent among young men in Madras and more

rarely found, but still existing, elsewhere—to adopt European fashions in regard to food, clothing, hair-dressing, &c. But we believe that the introduction of religious education in the form in which the Bible is taught in Christian Colleges and schools cannot produce the intended effect of checking the evils above mentioned, or even of transforming those who remain within the pale of orthodoxy into very much better Hindus than they are at present. We purpose to explain briefly our reasons for holding these views, and then to state what we consider the proper methods of giving religious instruction in Hinduism to our young men with a view to the promoting of a truly spiritual life among them and in order to give both Aryavarta and the rest of the world the benefit of our well-meant and well-directed efforts to promote the knowledge of the light and life that is eternal peace, joy, and freedom.

The religion of the Rishis is presented to us in two aspects consistent with one another and harmoniously leading to the haven of supreme bliss and love which is the goal of all human aspiration and effort and which all men are to attain in the process of spiritual evolution. These are the *practical* and the *philosophical* aspects of the Aryan religion. The practical aspect concerns the duties of life and consists of two parts, *viz.* the ceremonial, and the ethical and social. This practical aspect of Hinduism is what is known as Dharma, or Karma, or Yoga,—all of which are synonymous terms, though they may be used also with special reference to some particular portion of the entire circle or code of duties, daily and occasional, which are prescribed for men. With the Hindus, all human duties have one and the same source, *viz.* the authority of the *Śruti* and the *Smṛiti*, *i. e.* the scriptural injunctions of the divine sages and teachers who have known and taught the truth. Sri Sankaracharya has taught us in memorable words:—"Our knowledge of what is duty and the contrary of duty depends entirely on scripture. The knowledge of one action being right and

another wrong is based on scripture only ; for it lies out of the cognisance of the senses, and there moreover is, in the case of right and wrong, an entire want of binding rules as to place, time, and occasion. What in one place, at one time, on one occasion is performed as a right action, is a wrong action in another place, at another time, on another occasion ; none therefore can know, without scripture, what is either right or wrong." We *reason* about Dharma and Adharma only to ascertain what the prescribed duties are, to reconcile apparent contradictions, and to unify the whole into a consistent scheme of life. But we ought not to alter them, and we are bound to observe them in our daily life, as we have the authority of the divine seers who proclaimed them that they alone can bring about the spiritual purity and perfection of man so as to fit him for the realisation of the one absolute existence that sustains and pervades the universe.

Without the purification of mind and heart and nature now mentioned as resulting from the perfect observance of the Shastric injunctions constituting the Arya Dharma, no man can become fitted for the inquiry into, and the practical realisation of, the ultimate philosophical truths of the Vedanta. That purification, moreover, can only be obtained by placing one's self under the discipline and control of a properly qualified preceptor or Guru, who alone has the power and privilege of deciding whom he will take under his spiritual guidance and what sort of discipline would best suit his several disciples. The founders of the Vedic religion have laid down a comprehensive scheme of social organisation for the entire human race,—a scheme which includes all the distinctive types of human life and thought found in all existing communities. In ancient India that scheme was carried out in its entirety in what is known as the four castes (Varnas) and orders (Asramas). We have not that social scheme at work now in India, and we must not judge of what it was by the ruins of it now existing in India. We have,

however, ample justification for holding that the ancient Aryan social organisation had an amount of elasticity and solid unity of which we can now form only a vague idea from the records we have. We are not, however, concerned with it here except to state that the Gurus or spiritual preceptors alone had, under that scheme, the power to determine whom they will have as their disciples. Usually, these disciples were drawn from the "twice-born" castes. But that they also admitted others into their classes is clear from the several examples which are mentioned in the sacred literature of the Arya community. Without this arrangement it would have been difficult to preserve the social solidarity which was characteristic of Ancient India.

In the epoch of renovated energy and hope which has now fairly commenced, and under the democratic ideas which are now dominant among large numbers of educated men, all who have eyes can easily see that thoughtful Hindus realise that the elastic Hindu social system above mentioned is not inconsistent with true progress and that, if we have patience and faith, we can renovate Hindu Society so as it may assume, now or in some future not remote, a form which in all its essential features will bear a close affinity to that system and secure to us the social unity we require for worthily taking our place in the empire to which we belong and fulfilling our mission and destiny in the world.

In proceeding to consider the proper form of religious instruction for Hindu youths, let us then bear in mind, *first*, that the practical side of the Vedic religion is of the greatest importance as a preparation for the philosophic side of it and must therefore largely, if not entirely and universally, precede the latter ; and, *secondly*, that it must be carefully and cautiously adjusted to the present circumstances of India. Renounce the practical side of Hinduism,—the training it gives to body, mind, and spirit by a course of discipline suited to the condition and requirements of each student,—

and you take away all its speciality and its marvellous power to accomplish the spiritual progress of the Hindu race and of others who accept its holy guidance, and, the utility of its plan of step-by-step progress to spiritual peace and freedom. In India there can never be, and there never has been—at least in the days when Hindu religion was a reality, and even now among those, however few, to whom it is a reality,—a divorce between the practice and the theory of religion. That is because practice always precedes, or accompanies, the learning of the theory, and practice becomes perfect with the knowledge of the philosophic system of the Vedanta. The religion and theology of India is not merely meant to be an intellectual discipline, but a scheme of life to be consistently carried out so as to make the love of God and man a reality and not the sham it is elsewhere, and to render certain the steady advance in self-knowledge, self-conquest, and self-realisation till the goal of spiritual peace and freedom is reached.

So far we have spoken in general terms. We will now mention a few particulars to illustrate the above remarks. The Shastras lay down the rules as to how the student and the householder are to spend the day. There are people who believe that these rules are incapable of being carried out in the present circumstances of India. Nothing can be a greater mistake than that. The opinion is chiefly or solely held by those who, having been brought up in utter ignorance of the nature of the scheme of spiritual duty and discipline laid down for the student and the householder and having long learned to look down with contempt and dislike upon the past of India, naturally cry them down simply to suit their own convenience and to justify their present ideals and modes of living. Those who have learned what the rules really are and, what is more, have undergone the discipline they enjoin with the necessary amount of patience, self-control and devotion know that they are by no means burdensome, unhealthy, or inconsistent with the require-

ments of the times and circumstances under which we have to live. Those, of course, who are incapable of the two essential requirements of self-control and perseverance had better stick on to their present views and modes of life. *Abhyasa* (perseverance; and *Vairagya* (self-control) are laid down in the Hindu sacred books as the essential conditions of progress in the spiritual life. In fact, these two conditions are essential to successful practical achievement of all kinds in human life. If they are brought to bear on the spiritual life, success will be easy, and the gain immense; and none of the ways and means of getting on in modern life in any of the professions which go to make up that life need be sacrificed. For, the Dharma and the discipline it entails, while common to all men in certain respects, vary according to the nature of the professional activities of individuals and are subject to qualifications and exceptions according to the exigencies and demands arising from day to day. The daily baths and prayers must be regularly gone through and need not occupy more than half an hour at the most each time. The Panchayajnas prescribed for the householder are by no means burdensome, and many modern and educated men have been known who have faithfully and cheerfully observed the injunctions of the Shastras. But we are here concerned only with our students, and to them the performance of the daily baths and prayers and the study of the Veda—either the Sanskrit or the Dravida Veda—are by no means so difficult or require so much time as to interfere with their studies or sports. The prayers must be performed in the spirit and in the form prescribed for them. They must be combined also with the process of mental concentration known as *Pranayama* or control of the breath. It is only those who know nothing of the process, or will not practise it, that attack it or sneer at it. It is almost the first step in the process of mental control known as *Yoga* and even the beginner can see that the control of the mind already commences, (i. e.,)

even in the act of performing Pranayama. The greatest Englishman of the century which has just closed—Mr. Gladstone—once spoke of “the travail of spirit in devotion”. That is an honest utterance of a truly devout worshipper of God. Those who have gone through the process of firmly devoting their mind and heart to the deity in what Mr. Gladstone calls “the inner work of worship” can alone know that it is, to use his own words, “one of the most arduous which the human spirit can possibly set about.” But every one who makes use of the simple method of Pranayama while engaged in the work of divine worship knows well that that work is no longer the “arduous” process it once was, and that practice leads rapidly and easily to the mental concentration that is required for offering the full homage of the heart in the act of devotion. No doubt it is a most difficult thing to be able to develop the higher processes of Yoga and to lift the current of *Kundalini-Sakti* along the *Sushumna-Nadi* and up the various lotus—centres to the *Sahasra-Chakra* of the brain where alone the Yogi realises the soul's truly divine nature. Infinite time, exertion, preparation, faith, love, and grace are needed before the end of spiritual evolution in divine realisation is reached in the course of many births. But that the process is a real and realisable process—and not a snare or delusion—is known to those who can go through the preliminary step of Pranayama, and the whole forms a practical science which has been fully formed and matured by great teachers and consists of the combined physical and mental processes known as the *Ashtanga-Yoga*.

We have also a similar evolutionary course in what is known as *Bhakti-Yoga* or realisation of God through love. Here as in the other process of *Karma-Yoga*, the Guru or preceptor is needed, and divine grace comes in at last to hasten the final fruition. But the price that is fixed has to be paid, the sacrifice of the heart which is needed must be offered. That price or sacrifice does not lie in study or reasoning,

but in a course of disciplined self-devotion of the human mind, senses, and organs under the enlightened guidance of those who are themselves pure in mind and deed and are capable of undertaking the task of spiritual instruction and guidance.

With these facts before us, we do not see that much is really gained by teaching a few slokas and their meanings daily, or even in delivering a number of hortatory, expository, or polemical discourses in set phrases to an attentive concourse of interested students. The great fact we have to lay to heart is that the religion of the Aryas is *primarily* a course of training and discipline, and only *secondarily* a course of exposition and teaching. In western countries, religious instruction in the latter sense is freely resorted to in denominational or other schools. But this has only tended to produce fanaticism, bigotry, contempt for other creeds, false pride in one's own orthodoxies, and aggressive sectarian feeling and effort of various kinds. Dogmatic Christianity has supplanted Christ's Christianity. One of the greatest Christian preachers of to-day in England—Hugh Price Hughes—writes as follows:—“We have made the word of God of none effect by our traditions. We have perverted the most obvious statements of Scripture until the book has lost much of its interest for the busy masses of men.” And again: “We have deadened our consciences and paralysed our energies, by explaining away passages that refer to this present life, and by comfortably assuming that they described what heaven is and not what earth ought to be.” This is the result of all the gigantic efforts that have been and are being made to give Biblical and Christian instruction in all schools, Colleges, and Universities by means of lectures, sermons, class teaching, and endowments of various kinds. In India too we have had a great deal of sectarian polemics, but we have always insisted that religion consists in living the life prescribed and not in oral teaching and

logomachies, that true divine worship consists in dispassionate communion with God in one's own heart and while alone in the blissful and tranquil silence of the chamber, and not in carrying about wherever one goes the temper and tastes of the battle-field.

We think, therefore, that the only proper system of religious education for Hindus is primarily one, not of class instruction, but of training and discipline in the spiritual life as conceived by the divine sages who have revealed to us the Sanatana Dharma as contained in the Sruti, Smriti, Itihasa, and Purana. We think that in every town and village societies must be founded and teachers appointed and paid for the purpose of carrying out the injunctions of the Shastras according to approved methods and without clashing with the secular requirements of the age. While the spirit of the ancient system of discipline and instruction is maintained, necessary changes of form, method, time, and place must be made in the light of practical experience. The teachers must be properly and carefully chosen and each must be assigned a manageable number of pupils. Courses of training, curricula of studies, and time-tables must be prepared by the societies formed in the various localities, and an effective supervision and control must be organised. Provision must be made in this organisation for young men of all castes and sects according to their religious views, principles, and traditions. But no pains must be spared in bringing about a practical spirit of sincere devotion to religious duties and of love to God and man by organising and carrying out a course of practical discipline in the processes of self-devotion, self-conquest, and self-realisation in accordance with the injunctions of the Srutis, Smritis, Agamas, Itihasas, and Puranas. In India the introduction of this system of training and discipline in the life of the spirit is easy, for it even now exists though in a greatly decayed and neglected condition, and the times are favourable to its extended adoption or renovation among our

people in general and, especially, among our gentle and docile youth of all castes and sects. The world at large, both East and West, too, is panting for the advent of the true life of the spirit and is awaiting the gracious revelation and guidance of the elect who can exemplify in themselves the spiritual gifts which they would fain confer on others. It is only in India that such men are still to be found. Europe has become the chosen home of materialism, agnosticism, and scientific atheism. Only the other day, Mr. W. T. Stead, of the *Review of Reviews*, wrote:—"The materialism which dominates the Western world may some day have its corrective in the purified spiritual philosophy which has its home in India." In India alone there is no unnatural divorce between philosophy and religion. There is no philosophy without religion, and, as Swami Vivekananda insists, "religion is realisation." In the Western world to-day men have ceased to believe that the essential core of religion lies in realising in their own practice, the example and teaching of Jesus. The Christian Church has come between God and man and interposed its own extraordinary misapprehensions and misrepresentations of the truth concerning his life and teachings, and its present function is to help in the spread or maintenance of European mercantile and military predominance. Mr. Moreton Fullerton, a Christian writer in the *Fortnightly Review*, once declared:—"In both countries (i.e. England and America) there is very little of the actual spirit of Christianity. Jesus is the most discussed, but the least understood, person in history." European Nations are what they are, because they long ago ceased to follow Christ's teaching, and they have misunderstood his teachings in spite of millions of teachers and books. It is necessary to lead the spiritual life and to attain spiritual purity before we can be instructed so as to realise the truth concerning God. Unless the mind of man is trained so as to become pure, there can be no real manifestation of God in it; and mental purity cannot be reached

without undergoing a right course of discipline under a proper guide. Let us, then, endeavour by all means to get our youths in hand betimes and take all proper steps to have them trained in the practice of the *preliminary* Aryan gospel of discipline in accordance with the declared injunctions of the sages. The actual oral teaching can easily be given side by side according to the requirements of the individual pupils, and there is really very little use in entering upon elaborate courses of study or polemics without the necessary preparatory and purificatory discipline. Mathew Arnold has said, "conduct is three-fourths of life." But if we consider the real aims of religion, it can be truly said that conduct is the *whole* of life. Hindu religion and philosophy are intended to enable man to realise the eternal nature of the soul. This realisation is possible even while on earth to those who have attained the necessary stage and altitude of spiritual elevation, and certainly it is on earth that man is to achieve the purification of heart needed for God-vision, even though this may have to be realised only after subsequent stages of evolution in the realms of light beyond. Let us then, without loss of time, enter upon the path which leads to the goal of peace and freedom.

K. SUNDARARAMAN.

CO-OPERATIVE CREDIT SOCIETIES.

SEVERAL causes, prominent among which may be mentioned the recommendation of the latest Famine Commission, have contributed to bring this question now to the front, and the Report of the Committee appointed under orders of the Government of India last June has given point to the discussion and is now being commented upon by the Local Governments and the Press. It will therefore have some interest for the public of this part of India to learn what has been done in reference to this question by the Government of Madras during these six

years or what prospects of success it has here with the Committee's recommendations to help it up.

It was in March 1892 that the Hon. Mr. F. A. Nicholson was placed by the Madras Government for reasons not mentioned in the G. O., on "special duty for the purpose of enquiring into the possibility of introducing into this Presidency a system of agricultural or other land banks." Mr. Nicholson went to work at his Report with his well-known zeal and earnestness and having visited Europe for the purpose, succeeded in gathering a veritable mine of information bearing on the subject and between the years 1895-97 got up two bulky volumes on the 'possibility of introducing etc. into the Madras Presidency' which were submitted to the Government in due course. The Government meanwhile had referred Vol. I soon after its receipt (and a supplemental memorandum) to the Board of Revenue 'for consideration and report,' and that Body did so under Proceedings (Land Revenue) No. 412, dated 6th November 1896, having considered both for over seven months.

In the light of what has since occurred, it is well to pause over this particular Proceedings at some length for various reasons. If it does nothing else, it will at least serve to make the public acquainted with the attitude of the Board of Revenue towards this great question just two years previous to its being taken up by the Imperial Government as deserving of a special commission and special legislation and all the rest of it.

The Government, as has been said, had referred to the Board Vol. I of the Report as well as the supplemental memorandum of Mr. Nicholson urging that action might at once be taken by Government by means of certain encouragements held out to people who should come forward to open and manage such banks. At the end of seven months the Board was able to 'submit a joint resolution in the Land Revenue Department,' having suffered 'the Acting Settlement Commissioner, Mr. Le Fanu to be a party to these proceed-

ings.' A few samples from the rather ominous opening of the B. P. by way of abstracting Mr. Nicholson's Book, are enough to show us in what spirit the Board approached the question in this 'powerful Review.'

'The report is disfigured by an absence of definiteness in conception and a consequent want of clearness in aim.' 'He advocates the inauguration of a huge System of Village banks on the co-operative system, and on the basis of self-help etc.....' 'The boon to be provided is the reduction of the current rate of interest by one-half. This object is to be obtained, first, by the *elimination* of all working expenses. All service is to be rendered gratuitously. In the second place, the borrower and the lender, as individuals, are to disappear. Credit and capital are both to be pooled. Mr. Nicholson is hopeless of success *within any period which can be described as the near future*. He commits the fate of what he terms 'Educative credit' to the labours of villagers of 'apostolic fervour,' who will be content and proud to toil in person, without fee or reward, for the regeneration of those around them.' 'He has merely made a reference to the Greek Kalends!'

These sentences taken from Paras 3, 4 & 30 of the 'Resolution' suffice to show the basis that underlies this famous Review. That Mr. Nicholson's book is free from faults, no one need undertake to maintain. But that at the same time there is a difference between a sympathetic Review and a cynical and unbelieving Review, every one must be equally ready to grant. An impartial reader in this case is driven to suspect something more than mere honest difference of opinion lying behind the Resolution, that has prompted the vast amount of acrimony, sophistry and personality which most of its paragraphs seem to discover. The Board itself seems to have feared something like it, for having given this travesty of a summary of Mr. Nicholson's book, it proceeds in the very next paragraph to say that it 'trusts that it will not be found to have done any violence to Mr. Nicholson's views in the above abstract!'

'The main objections of the Board to the proposals of Mr. Nicholson might be given under a few headings with a few words of running comment in each case. In the first place the Board sees no urgent demand for a scheme of rural banks, such as Mr. Nicholson advocates. For it says that, except the four line order of the G. O. of 1892,

there was up to this period, no local official literature whatever.' This perhaps was the case. If so the Board does not care to state why or by whom it was that Mr. Nicholson was placed 'on special duty' four or five years earlier and desired to prepare a huge and monumental Report on the question. It merely leaves us to infer that all that expense and trouble was due to somebody's fad—possibly the Reporter's own zeal!

Next the Board is sure that there is no agrarian indebtedness in Madras grown so acute as to justify the drastic proposals of Mr. Nicholson. The economic condition of rural Madras is so near an ideal state of things that the Board is afraid that meddling of any kind with it can only be evil. The Board however sees one dark speck on it which needs meddling, perhaps drastic meddling.

'In Madras the land revenue absorbs a considerable portion of the produce.....Advances are wanted for various purposes, notably for the payment of Government demand, which is fixed and must be met. The sowcar is therefore a necessity.....There is nothing radically unsound in such a system, though the Board is inclined to think that some of its incidents might be avoided by better administrative arrangements.' Some drastic improvement in the operation of those branches of the administration which deal with the collection and assessment of the land revenue, with special reference to the rigidity of the government demand 'in its most comprehensive sense,' is what, in the Board's opinion, is needed to mend the ryot's lot,—as well as 'diversion of people from depending solely on land.'

Nevertheless it sees that there is some 'vast and intricate agrarian problem which is with increasing persistency beginning to confront government in the Madras Presidency,' and is aware that to the solution of this problem many factors have to contribute, of which, we are glad, cheap credit is one. It is clear then that the difference between Mr. Nicholson and the Board is merely one (in the words of professor Nicholson,) of difference in the *adjustment of emphasis*.

Again the Board is of opinion that even were Banking of the kind contemplated a needed reform its establishment is not an *urgent* reform and might therefore well be 'relegated to a distant future.' What a biting commentary on this optimism that within two years after this 'powerful Resolution,

was penned, the Government of India should have taken the question up with so much earnestness as the conference of Simla would seem to indicate! In the light of the proposals made by this Conference, let us see how some of the more important objections of the Board sound.

(1) 'A sudden flooding of the country with co-operative banks is disturbing all existing contracts and is therefore an act of spoliation at which the present money-lenders might well be indignant!' The answer to this is that no one ever proposed that the country should all at once be filled with co-operative credit banks or that the Aladdin's wonderful lamp needed for the purpose was ready with us somewhere here to effect it.

(2) 'Cheap credit will amount to ignoring *gradations* of credit and the difference between interest proper and insurance against risk; and it will start the peasants of South India on a race for insolvency!' Here again no one proposed that any of these societies should ignore 'gradations' which we have always with us. But rates of 'interest' and 'insurance' are surely moveable and not fixed once for all. And if banks are business concerns first and philanthropic within limits next, as Mr. Nicholson has defined them to be, 'a race for insolvency' need not be the only fruit to be expected of them, even granting that such a fortune may sometimes be in store for one here or one there.

(3) Without aid from Government such concerns cannot go on, thereby showing that there is an 'utter absence of confidence between man and man in the rural parts.' 'Without confidence there can be no credit and without credit banking is impossible.'

Readers must be pardoned for believing that seeking help from an Omnipotent Government in cases from which good is expected to result, cannot possibly be a crime and cannot always be construed into betraying any 'unconscious confession of the weakness which underlies the whole scheme.' Again with regard to the 'utter absence of confidence,' it

does not seem to be so universally true of rural Madras as the Board would seem to make it out. Surely there must be some distinction between place and place. Surely the whole of it cannot be one 'unweeded garden grown to seed.' Again even granting that there is absolutely no honesty and confidence in rural Madras, it is somebody's business to suggest some means of creating it or to say in plain terms that Madras in this respect is doomed once for all and 'rural mirth and manners' are never more to be seen. Or if the Board believes, what might be regarded as nearer the truth, that there is difference between place and place in regard to honesty and credit as in regard to fertility, it is surely a distinct advantage that the places where credit can thrive be helped with crutches until they are able to run on their own legs. The Board's proposition regarding credit and confidence cannot but be regarded as a sophistry and reminds one of a homely Canarese saying—that a father was resolved not to marry his son until he had his sanity restored to him, while the son was resolved not to suffer his sanity to come back to him until he was married! We must also pass by the Board's theory of the evolution of credit, merely remarking that Providence can surely have other orders of 'mercantile progress' in store for people than the one recognised by the Board in para 21 of its Resolution. Here as elsewhere the Board seems to strongly believe in a 'mechanical theory' of rural progress, as opposed to the 'moral theory,' and most content to leave the curing of rural evils, such as they are, to 'the healing power of nature.'

(4) The Board also smells a great political danger in the revolutionary proposal that Government should finance such concerns at the outset and allow certain concessions to them which the Board calls 'disguised subventions!' "The Government of this country is already in a delicate position, in that it is the great landlord of the country, and it is therefore most unwise for it to be its usurer, also! The professional agitator would rejoice over such

a blunder!!" If the financing by Government in such great and useful concerns is such a danger, one does not clearly see how the Board can consistently approve of the agricultural loans, as it seems to do, or many another 'disguised subvention' of that kind that have been suffered to be given to the rural population. Similar and more serious dangers can surely be augured of every beneficial measure that the government adopts to save this country, so that the plain conclusion forces itself on us all that the duty of the government is to sit still with folded hands and let 'evolution' work itself out as it best might! Since the Board finds that the government *has* become the great landlord of the country, it cannot fail to find that the landlord's rights and responsibilities have likewise devolved on the government, which must therefore be prepared to face and brave questions, not to shirk them or 'relegate them to a distant future,' or, as the Board would have it, think of remedies after the disease should have grown desperate. It is an English proverb that tells us that prevention is better than cure.

Lastly, 'the Board is positive that the human materials necessary for the working of these village banks are not forthcoming in the mofussil. Here again we see another instance of sweeping condemnation. It means that in the whole of the Madras Presidency, there is not a single spot to be pointed out, where the necessary 'human materials,' (not of an ideal kind, let us note, but even of the average kind found in other countries,) are to be found! This, if true, is an awful predicament for the government as well as for the country. Let us trust, however, for the safety of both, that it is not so hopeless, but that a few spots might show a different state of things. The Board for instance does not say that the system of agricultural loans, beset as it has been with administrative difficulties of many kinds, has been a *thorough and huge failure*. Though it has failed here, it has done excellent work there. Similarly the favoured spots may

be helped to begin work in this case and their progress closely watched. No one expects that credit societies will spring up simultaneously in all parts of the Presidency at the wave of some magician's wand, and establish themselves on the soundest imaginable basis at one stroke.

Such are the most important objections advanced by the Board. And with such a 'powerful' review of the Report before it, it is truly a marvel that the Government of Madras has shown itself so favourable to the scheme as it has! After having read the Review, one would readily believe that the whole scheme was knocked on the head and shown to be visionary and ill-conceived. The Government, one might expect, would have merely 'recorded' the whole with a word or two about its agreement with the Acting Settlement Commissioner's opinion of these village banks being 'the spring of woes unnumbered' to the rural population.

But the Government holds a different view of it, though in some essentials it suffers itself to be influenced by the Board. Mr. Nicholson's scheme is viewed with sympathy, at the same time that the Board is patted on the shoulder for its foresight and sagacity. The most important of the 'open subventions' 'as well as disguised subventions' are pronounced to be impossible, but certain minor rights coming under the latter class are conceded. Mr. Nicholson is then dismissed with the blessings of the government and given permission to try to induce 'the establishment by private persons of a single typical co-operative bank in any district of the Presidency that he may select—not of course in a large town with officials, lawyers and schoolmasters for its principal members, but in some representative village.' And the government is also pleased to add,

'If a single rural bank—or better still if two or even three—could be started on strictly Raiffeisen principles, and the working watched for a few years, information would be acquired as to whether the Board of Revenue is right or wrong in holding 'that the human materials necessary.....mofussil.' If this prognostication should prove to be incorrect, as His Excellency in Council hopes it may, he would be in a position to

recommend to the Government of India,' the case of these banks and arrange for the legislation needed..... 'If it is possible, as the government hopes it may be, to induce the establishment of experimental co-operative banks in one or two villages, Mr. Nicholson's guidance will be of invaluable aid towards their development and extension.'

It was at this stage of the discussion that the present writer's attention was drawn to the subject. It is needless to detail the circumstances that led to it or to give the writer's special qualifications which entitle him to speak or write on this question. Suffice it for the present to say, that the manifest injustice done by the Board to Mr. Nicholson whom every one, who has known anything of him, learns to regard with special reverence, and the challenge thrown out by the Government, induced the present writer, who has had some personal experience of the evils of usury in connection with the payment of Government dues, to see if the human materials 'needed to begin a test bank' were not to be found at all as the Board had stated. He was glad, however, when, after some beating about, he found that the 'human material' of a fair enough type was available, as well as a centre, where the experiment might begin with every prospect of success. Accordingly he ventured to address Mr. Nicholson on the subject and show how and where the test bank might begin and the conditions on which the friends on whom the writer could rely were prepared to conduct it. But, as the two conditions on which these friends insisted—and which, have since been accepted by the Simla Committee, the one in its entirety and the other partially,—had been expressly vetoed by the Madras Government, Mr. Nicholson could only regret his inability to move the Government any further on its behalf. These conditions were (1) recovery of loans by summary procedure and (2) subventions from the Treasury under certain circumstances. The former privilege is proposed by the Simla Committee to be conceded with desirable reservations along with several other valuable aids. But in regard to the most essential of all, namely subvention, it is to be regretted

that though the Committee give it as their opinion that in principle they see 'no objection to the provision by Government of a portion of the capital required for the working of co-operative societies in the form of advances on the security of the society,' they 'consider however that in the case of societies on a share basis, Government loan should not exceed Rs. 2,000, in any case and should be limited to half the amount actually subscribed for share capital.' And this aid is to be recovered, in ten instalments or more.

This recommendation makes it clear that the committee have in view societies of very small dimensions. In the words of Mr. Nicholson the societies contemplated seem to be "small societies of men working co-operatively with very small funds, giving very small loans at practically no cost with practically no profit and—with no losses." If this be the object to be realised, the writer has been enabled to say that it is not capable of immediate realisation, at least so far as the parts of Coimbatore, with which he is acquainted, are concerned. Accordingly, the Board having been kind enough to favour the present writer with a copy of the Report of the Simla Committee and the letter of the Government of India forwarding the Report to the local government, for expression of opinion, he has taken advantage of it to state—what happens to be the best available opinion here of those from whom the practical pioneer working of the scheme might be expected in case an experiment should ever be thought worth making—that, though the formation of such small societies might be kept as the ideal to be reached in due course, the beginnings could not be expected to discover such complete co-operation, nor could they be made to run even with government support, if sought to be worked on such small scales at the outset.

With a view to meet the needs of these parts, therefore the following modifications in the recommendations of the Simla Committee have been suggested by the writer. (1) Whereas

complete co-operation such as was discovered by the Rochdale pioneers, has been assumed in the case of the proposed credit societies, even from the very outset, the writer has been led to state that that assumption cannot safely be made of these parts and that therefore we must be satisfied at the outset with partial co-operative benefits—such for instance as might be supposed to spring from the fostering of thrift by inducements offered to ryots to make those small deposits of savings, what little of which there is at present, is practically non-existent for the rural needs.

(2) Again, whereas the committee contemplate 'small societies with small capitals and (though they do not say it explicitly) evidently understand by 'small' a capital of say Rs. 5,000 or 8,000, the writer has proposed as the only practicable alternative, that 'small' should be made to mean any sum ranging from Rs. 30,000 to Rs. 50,000 and for these reasons among others—that the interest charged on these loans for agricultural purposes must necessarily be at lower rates than the rate allowed by the Committee (*i.e.*, 12½ p.c.) that there is such a thing as working expense, which can in no case be 'eliminated,' that those that subscribe must receive at least something like an apology for a dividend to induce them to do it and, that at the outset and for some years to come at all events the average 'turn over' of the society could not be expected to be sufficient to meet these demands under the semi-philanthropic limitations imposed on it, unless the capital of the society is taken at the minimum given above and unless the sphere of its transactions is pretty wide—say the *firca* of a Revenue Inspector. (3) Lastly, the question of questions is that which relates to Government subventions. The maximum amount proposed by the Committee to be allotted to any one concern, it has been found to be Rs. 2000. From what has been said about the capital needed to work such societies in our parts it will be clear that this help goes but a little way to encourage their forma-

tion or their development. Accordingly the writer has suggested that, rather than qualify the principle laid down by the Committee in the way in which they have done fixing a maximum, the Government be persuaded to adopt the principle itself slightly modified. For instance the Government might be prepared to subscribe a third or a fourth of the capital actually paid up—at least in a few test cases and see how it works. The conditions upon which this is done might be made as stringent as the Government pleases, in order to secure its contribution from any possibility of abuse or fraud. Again the amount of contribution need not be made unless the Directors of the society show that they have a busy season of it and have a real demand for it. Further, it might be made returnable as soon as the slack season begins either wholly or in part. A 'floating' arrangement like this seems very advantageous to both parties and in so many ways. And no strong objection can be made against it, such as has been made in the case of loans proposed to be made for periods more or less long. The one reason why this sort of temporary accommodation from the Treasury has been held of such importance, is a very simple reason—that as the society's rates of interest are to be lower than what obtain in open markets, as the working capital needed to carry on business in a Revenue *firca* cannot be expected at the outset to be *wholly* got from shares or deposits, as the society even under the most promising circumstances, cannot hope to get accommodations from extra-Government agencies on the cheap terms as it can from Government, and as its transactions are closely controlled by Government, it has been thought desirable to urge this as an indispensable condition. It is however easy to see that this helping with crutches need not go on for ever. If the society is once tried for a given period and not proved wanting, if at any future time it seems to Government, whose control of its operations is unreserved and absolute, that

the society has passed the stage of feeding-bottles and can be relied on to be more and more dependent on itself and less and less on crutches, the Government can easily, gradually and smoothly withdraw its doles and leave the society to run on with its blessings. At least this experiment may be tried in a few cases, as the Madras Government would have it, and its result closely watched. Under the conditions to be imposed upon, it is humanly speaking impossible that anything should go wrong with the money advanced by government for short periods to these experimental credit societies—the smallness of their number, the exceptional character of those who might be expected to work as pioneers, the easiness and the strength of government control, the safe fraction which the aid forms of the capital actually subscribed, are all guarantees enough to induce the government to try the experiment without misgivings. If however the government should, at any stage of the experiment, have reason to think that it is not smooth-sailing after all, it is open to it to stop experimenting and arrange to withdraw at once. The failure can in no conceivable case be due to government. The managing agency will have to thank itself for the undesirable end, if it does not care to benefit itself and the cause of the movement. But this, however, is a contingency which is rather remote. In the meanwhile let us hope that a better fortune is in store for a movement which in spite of Mr. Le Fanu is believed by many to be able to prove in the long run something very different from an unmitigated curse and to make him contemplate the possible results of the new departure with a great deal of agreeable dismay.

If the plan advocated here should prove acceptable to the government, which however the writer is not so sanguine as to expect anywhere in the near future, and if Coimbatore be regarded as a fair field for an experimental bank, the writer believes that an excellent occasion presents itself for testing whether in so far at least as that single experi-

ment is concerned, the Board has not made a manifest overstatement about the absence of 'human materials.' The Board seems to have assumed throughout the possibility of creating almost at the same time co-operative banks over the whole Presidency and making them run all in the same groove without variation. This assumption, it need hardly be added, is unjust both to itself and to Mr. Nicholson, whose report it seems bent on demolishing. The fact however seems to lie in a different direction altogether. For, let us grant that the experiments are found successful and that the legislation needed is also forthcoming, both which by the way are matters extending over a pretty long period. Even then no one supposes that all at once the Government Secretariat will be flooded with applications from all parts of the Presidency for help of the kind contemplated. 'Here a bank, there a bank,' is bound to be the rule for a long time to come, and when that desirable period is reached, when over all parts of rural Madras one close network of co-operative banks has to be formed, many of the older ones might well be supposed to have become weaned or the government of that day might be supposed to be perfectly capable of looking after its own affairs. Let us hope then that some 'hero' of the present government will see his way to 'doing something' to set the experiments suggested on foot somewhere in the Presidency—at Gudalur on the Podanur—Mettupalayam Branch, in the absence of better centres, the reasons for pitching upon this particular station having been given by the writer elsewhere on a former occasion.

C. N. KRISHNASWAMI AYYAR.

MALABAR AND ITS FOLK.

A SYSTEMATIC DESCRIPTION OF SOCIAL CUSTOMS AND INSTITUTIONS OF MALABAR

by T. K. GOPAL PANIKKAR, B.A.

WITH AN INTRODUCTION BY THE

Rev. F. W. KELLETT, M.A., F.M.U.

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THE VAPOURS AND THE GASES OF THE ATMOSPHERE.*

THE ancients, in considering air as one of the five elements, had an idea which was, to say the least, infinitely very simple. The atmosphere which surrounds us is a very complicated mixture. In truth, we live in a cloud of dust, smoke, and gaseous emanations, most of which are injurious to health and in general deleterious: These are the impurities which contaminate what we unanimously describe as 'chemically pure air.'

The most harmful gases, among these foreign materials, are not immediately apparent; they do not manifest themselves to our view. The vapours and the dusts of sorts, on the other hand, are clearly visible: they reveal themselves to our sight by their accumulations, in troubling or shaking the limpidity of the atmosphere. When one approaches from a great city, he perceives a kind of mist or fog hiding from view the details of the tableau, and stamping the traits of the panorama. This blurred view, which could be seen very well of a morning from one of the hills round about Bombay, floats like a light fog outside the city, which it appears to cover with a kind of huge cloak. It is made up of the *Debris* of all the innumerable objects which manipulate and destroy themselves ceaselessly during the onward march of the great city, the dust rising from the soil, the particles of charcoal and soot emitted by the chimneys, in short, all the fragments, which are allowed, owing to their smallness and the insignificance of their weight, to rest sometime suspended by the action of the air-currents. This heavy cloud is also a veritable fog, in the exact sense of the word. In fact we know from Tyndall that the solid particles of atmospheric vapours have the curious property of attracting evaporated water in their

vicinity. They serve as a nucleus of condensation for the vesicular water, of which clouds are generally composed, and which forms rain drops.

These diverse impurities are, evidently, more abundant in the atmosphere of towns; but one discovers them in the air of fields and meadows or woods; and to escape from them, one must climb a mountain even up to its highest summits, where, precisely, and for other reasons, the air ceases to be respirable. We are condemned, then, to put up with impure air, may be, more fatally and even more rigorously than we are to a regimen of impure water. And, as it is an idle fancy to hope for an atmosphere free from all impurities, we should simply seek to neutralise its effects, in a certain measure—the most inconvenient and the most injurious effects of the species of mixture, which is offered to our lungs. That there will be fewer pathogenic microbes in atmospheric dusts; that there will be fewer poisonous gases in the mixture designed or intended for respiratory purposes, is a hope which we can reasonably entertain; it is also the task which ought to be assigned to the administrative services, to which belongs the regulation of our hygiene.

I

The inconveniences due to the fouling of air by the gases and vapours continually thrown out by the furnaces of the different establishments and factories in a city like Paris or Bombay, have greatly exercised the minds of hygienists and sanitarians, and especially of the distinguished men of science and letters, who compose the Council of Hygiene and Salubrity of the Seine District. Ten years ago, that is in 1890, this assembly elected from its members a technical committee, composed of Messrs. Linder, Lion Colin, Armand Gautier, Foucher, and Michel Levy, to whom it confided the mission of studying the degree of vitiation of the Parisian atmosphere by the emanations of furnaces of all kinds, and of pointing out the dangers which might result therefrom, and the means to protect the inhabitants from the consequences. The eminent chemist Armand Gautier

*For the contents of this paper the writer is indebted to an article in the *Revue des deux Mondes* of Paris.

accepted the onerous task of conducting the difficult researches.

The necessity became more pressing every day, the damages or injuries getting aggravated and more pronounced every year, with the extension of electric installations in the great emporiums, the hotels, the theatres, and the public administrations. The Parisians commenced to complain much of the emanation of these black and thick heavy vapours which pollute everything round about them, covering with a kind of gross adhesive substance the walls of edifices and houses, soiling the furniture and tapestries of apartments, and blackening household linen and cloth. These are the least objectionable of its misdeeds; but as they are also the most apparent, this is the form of the, in some way tangible, plague which has provoked the most vehement of popular protestations.

And yet it is not the most harmful in its effects. (On the other hand the light vapours—the invisible colourless emanations from furnaces, expose public health to the most insidious and unconquerable of perils. In 1890, the Council of Hygiene gave out as its opinion that most of the industries which produced fumes or vapours, should be classed among the most unhealthy and inconvenient establishments, and relegated to the outer precincts of the city, or the regions beyond the city walls. This proposal did not, however, prevail. The committee of arts and manufactures issued an unfavourable notice, and the minister, by his decision of 24th May 1890, cast it aside.

Primarily, the emission of fumes was forbidden inside of towns (in France). The Police regulation of 11th November 1854, and the decrees of 19th January 1855 and 30th April 1880, compelled the managers and administrations of the different factories not to allow their factory chimneys to smoke before having submitted their fuel to complete combustion. The force of events, and, may be, also the *laissez faire* of the administration have allowed these protective pre-

scriptions to fall out of practice. But the abuse had become so scandalous and the evil had assumed such proportions that it had become imperative to revive these excellent regulations; and at last they were resuscitated by the law of 22nd June 1898, which interdicted the emission of black, thick smoke, prolonged for a long time. It is a less radical, and above all, less precise prohibition than that which obtains in England. In the United Kingdom, the law courts, being frequently called upon to adjudicate suits provoked by the inconveniences of the black and thick smoke, have laid down that this emission could not be tolerated for more than a minute or two per hour.

The ordinance of 1898 has become law since 1899. But its application has been confined to the inspection of classified establishments. In the course of this first year it gave rise to 370 complaints, two-thirds of which were judged to have been well-founded; administrative measures have been taken in 270 cases, and verbal processes applied on twelve occasions. It should be noted here that the establishments which are very frequently in default are precisely those which are maintained by the State: the hospitals, and notably the Laennec hospital, the ministry of Finances, the Sarbonne, the Odéon, the Postal administration, the prison of La Sante,—to mention only a few of the lot.

M. Michel Levy, in his report of 4th March 1898 on a project for regulating smoke-consumption, admits that it is possible to reduce, in a very large measure, the escape of the particles of charcoal, soot, and tar, from smoking furnaces. In 1894 a concourse was called together by the city between the different systems proposed for the suppression of smoke and vapours and the construction of smoke-consuming furnaces. Out of 110 apparatus presented for trial, eight gave satisfactory results. They caused the solid and visible parts of smoke to disappear, thus assuring more perfectly the combustion of charcoal, substituting coke for oil, and controlling the furnaces. The choice of

fuel, the disposition or arrangement of the grate, the conduct or guidance of the fire, and the care to avoid additional burden or charge insure a well-nigh perfect combustion, whatever apparatus is used. A more scientific and more efficacious method is employed in the saw-mills of Glasgow. Its inspiration is due to a principle laid down by a very able French chemist—M. Schlesing; following which they proposed to carry away the smoke, to subject it to a cooling process, and to wash it by means of a jet of vapour. Thus the smoke is rid of all solid matter in its composition, and also of a portion of its poisonous gases. At Glasgow the solid particles daily emitted into the atmosphere, have been reduced by this means from 46 kilograms to 2 kg. 700 and the sulphuric acid carried away with them (the solid particles) has fallen from 14 kg. to 7 kg. 5.

The very precise analyses of Austen Robert have made us acquainted with the weight of fixed particles of smoke let out by the different kinds of fuel used, viz.:—oil, coke, and anthracite, while burning, in ordinary chimneys, in the chimneys of fumivorous furnaces, or in the perfected stoves. On comparing the results of burning oil and coke of equal weight, it was found that the former invariably gave three or four times more parts of the solid, opaque, and sullyng matter. Anthracite holds the medium between the two. After these results, a mixed fuel would furnish the ratio of 5 milligrams of solid smoky matter to each kilogramme of such fuel.

On the other hand, everybody knows what is the annual consumption of charcoal in Paris. It could be very clearly represented by the following hypothesis. Suppose for instance that all the store of fuel intended for use in a year in Paris is carefully spread over the area occupied by the city. There would be, under this supposition, 37 kilos. of charcoal to every metre of the surface occupied. And thus each superficial metre will throw out, in the course of a year, 2 grams of soot into the atmosphere. This proportion will be doubled in

the case of cities like London and Manchester, which make an almost exclusive use of oil. This quantity of the subtle material diluted with the atmospheric mass enveloping the city makes it imperceptible. It suffices also to make it foggy.

If the smoke is gathered at the very moment it emerges out of the air-hole of the fireplace, it will be found made up, in almost equal proportion, of two kinds of matter, one organic, the other mineral. The latter is composed of a fine dust of sulphates, phosphates, carbonates, silicates, alkalines, or earthy alkalines. The organic matter has in its composition fatty, muddy, and adhesive particles of solid hydro-carbure, mixed with very graduated charcoal.

M. A. Gautier, to whom we are indebted for most of the information contained in this paper, has remarked that even the suppression of visible smoke and vapours, which shut out the public view, will not satisfy the sanitarians. The injurious gases, which are the usual companions of these smoky emanations, although not visible to the eye, offer the gravest inconveniences. It won't at all be as if a sufficient service was being rendered to public health, if the soot and the charcoal only were removed, and such matters as the carbon of oxyde and the cyanhydric acid, which are poisonous even in the very small doses, allowed to remain; or else such substances as the carbonic acid, coupled with the largest doses; or, lastly, the corrosive agents like the sulphurous acid and the sulphuric acid, which are capable of injuring roofs beaten by the rains and the mists, of attacking metallic facings and coatings, and of displacing the stones and marble slabs which are used in the ornamentation of the city. Moreover, the fact must not be lost sight of that the working of the industrial and domestic furnaces in Paris alone, pours out into the atmosphere of the city, more than 20,000 tons of these gaseous products.

It is not the case that the visible fumes abstracted from the poisonous gases which accompany them might become indifferent or innocuous

to health. Such fumes do work on the public health, at least in an indirect manner. In short they form a screen, more or less opaque, which arrests or sifts luminous rays or light, and takes away from the streets, the houses, and the inhabitants themselves the health-giving action of light. The sun-god is good to man. Not only does he (it) light and gladden his soul, he also excites and enlivens his body. Moreover he is an auxiliary or helpmate of our bodily organism in the contest with its enemies, the pathogenic microbes. The Romans of old took on the terraces of their habitations sun-baths: contemporary medicine, and, above all, the Danish doctor, N. Nilsen, have revived this old system of the "sun-cure." The simple *solarium* of the Romans has become, with more publicity, a phototherapeutic institute, and numerous cures have been obtained by the agency of light—natural or artificial; and, recently, the learned Doyen of the Faculty of Medicine of Lyon, M. Lortet, read a report before the Academy giving decisive or definite examples of such cures.

The fact is that solar rays are fatal to the microbes. These do not develop or breed well in diffuse or plain daylight, as was observed in 1877 by Messrs. Downes and Blunt. They perish in strong clear light in more or less time. M. Arloing in 1885 killed the bacteridic of charcoal by exposing them to solar radiation for two hours. The micro-organisms of tetanus, tuberculosis, typhoid, cholera, or of plague perish equally by insolation. A great number of investigators—Fermi, Koch, Roux, Duclaux, Yersin, Nocard, and Kitasato, have established the efficaciousness of this means of germ-destruction. The sun is, therefore, a natural antiseptic, and consequently a health-conferring agent of the first order. It is well-known that he (the luminary) exercises this action by the most refrangible, blue, violet, and deep violet of his radiations. Now, it is precisely these beneficent radiations which are arrested or held back by the particles of smoke in the air, or

to be more exact, by the envelope of aqueous vapour which surrounds them.

II

The question of liberated gases, with or without visible smoke, and which cause the vitiation of the atmosphere is not of less practical interest. But it presents a scientific interest otherwise important, and almost of the first order. Eminent men of learning and scientific renown have applied themselves, for a long time, to its elucidation. In 1827, the learned naturalist, Péclet, analysed for the first time the gases which escape from domestic firesides. In 1844, Ebelmen gave himself up to an analogous study *a propos* of industrial furnaces and high chimneys. From 1870 to 1875, Scheurer-Kestner and Mennier examined the same problem in respect of furnaces of steam-engines. In England, Percy Frankland and A. Smith have particularly indentified themselves with the problem of smoke-consumption. But above all, in 1882, Austen Roberts, the learned Professor of the Royal School of Mines, resumed the researches of Péclet with the considerable developments which have since taken place, and with perfect care instituted a systematic comparison of the products of combustion engendered by domestic warming and heating, following the particular kind used of furnace, grate, or stove, and the nature of the fuel, oil, coke, or anthracite. It is a fundamental memoir. There remains still to be cited here the investigations of Schwachhoefer in Germany, and in France those of M. Moissan, who in 1894 made a comparative examination of the gases produced by the combustion of wood, and of those given out by the mobile stoves of anthracite. In short M. A. Gautier, the learned chemist of the Faculty of Medicine, nominated in 1890 by the Council of Hygiene to fix the scientific data of the problem of the vitiation of the atmosphere, has consecrated seven years of his valuable life to this long and arduous task, in order to bring it to a successful termination.

III

M. A. Gautier proposed to himself to determine the influence exercised by the products of combustion on the composition of the atmosphere of Paris, and to find out in what measure these products are able to make it different from a pure and normal atmosphere.

Before everything else, therefore, we must ascertain the composition of normal air. It appears, at first sight, that nothing could be better known. Lavoisier has, in fact, fixed this composition: he considered that atmospheric air was composed of a dilution of five-sixths of azote with one-sixth of oxygen. The most recent investigations of M. Leduc (1896) have hardly modified these figures. In volumes, the quantity of azote is of 78,06 density and that of oxygen of 21,00, and there you have the slight change which a century of precise measures has brought about in the composition of atmospheric air, in respect of its fundamental constituents.

But, by the side of these principal constituents, there are other accessories which are superadded in some way. These exist in only very small and variable quantities, variable according to time and place: They do not at all share in the fixity of proportions of oxygen and of azote; and the existence of any one of them is not even constant and universal. And this observation permits us to divide these secondary constituents into two classes: The permanent elements which could be found always and everywhere and of which the proportion alone varies,—for example, water-vapours, carbonic acid, ozone, and ammonia; in the second place come accidental products, of which the presence as well as proportion, depend on external circumstances, as, for instance, oxyde of carbon, formene, sulphured hydrogen, the hydrocarburers, iode, &c. And one could see well enough, after that, that all these superadded substances could only have their origin in the phenomena which take place at the surface or in the profundity or heart of the soil and waters.

They end into the atmosphere as the weir common to all the liberated gases and vapours.

This is not the place for us to dwell on the principle even of this classification of the elements found in the atmosphere, some fixed or stationary as regards their proportions and the others variable. Even the principle of this fixity of proportions of oxygen and of azote is disputed or called into question. Contested by Priestley, established by Cavendish in 1781, the invariability of the proportions of the two principal cases has been placed beyond doubt by the thousands of corresponding analyses performed by Gay-Lussac, Humboldt, Brunner, Frankland, Dumas, Boussingault, Bunsen, Regnault, and Reiset, on the air of the plains, of mountains, of the high seas, and of the littoral or sea-coast zones. They have gone further: in examining the causes of increase and those of decrease of oxygen and of azote, it is considered as established that they compensate each other exactly. The equilibrium present is not then only a fact, but a law of nature. The same causes which establish its existence at the present time, will contribute to its maintenance in the future as they have assured its presence in the past.

However this fixity could not be of so absolute a rigour as the general public opinion imagines. The proportion of oxygen in the air varies in an appreciable manner in the same place and in the same season of the year. M. Leduc has remarked that in London in Winter, the mean proportion of oxygen in the air might go down to 231 milliemes, and its weight per litre of air to 1gr. 2756. That is to say it means a variation of more than $\frac{1}{10,000}$ th;

and it follows, therefore, that the choice of atmospheric air as the standard of density is not justified by the circumstances.

Besides, the fixity of composition cannot be better assured in the future, just as it is not at the present moment. There are reasons to believe, with M. T. Z. Phipson, that oxygen at the surface of the globe is of a recent formation, and that its

quantity is always increasing. Inversely, M. Berthelot has put in evidence circumstances which tend to diminish the free azote :—these are feeble electric currents which transform it into azotic acid or azotite of ammonia according as the milieu is dry or humid ; it is the fixation of azote in the clayish soils and on to the roots of leguminous plants (pulse), thanks to special micro-organisms. To sum up, the azote tends to decrease, while the oxygen increases.

Whatever might become of so interesting a problem, we are not concerned with its solution in this place. It has to do not with the fundamental elements but with accessory gases. Our information in this regard made the first step towards important progress in 1894. In that year Lord Rayleigh and Professor W. Ramsay put in evidence, in the case of atmospheric air, new bodies : argon, krypton, neon and metargon, which until then were considered as simply azote. These are the universal and permanent elements of the constitution of the atmosphere, and even their proportions, if at all variable, are so only within sufficiently restricted limits.

Carbonic acid is also in a similar condition. It has been analysed a number of times : the analyses have been made systematically daily, and even twice a day, at the meteorological observatories. In Paris they analyse daily the air of Montsouris, and compare it with the air in the heart of the city. As might be expected, this latter air has been shown to be richer in carbonic gas. The air of towns always contains more of this constituent than that of the country. It is the result already deduced by Boussingault and Levy in 1843. They found, in 100000 litres of air taken from the environs of Paris, 29 lit 9 of carbonic gas at Montmorency, against 31 lit in the sample of air taken from about the college of France. It will be seen that the difference is slight : the oscillations stand at the lowest figure : they reduce themselves to two or three thousandths. It thus nearly comes

to fixity. They have investigated the reasons of this quasi-invariability, and Schloësing has made public the regulating mechanism which automatically compensates the atmosphere for its gains and losses. This remarkable compensation has for its instrument or agent, carbonic gas stored in fresh and salt waters in the condition of bicarbonate of lime.

This is not the place to refer to the two other permanent constituents of atmospheric air—ozone and ammonia. We are only concerned to speak here about what M. A. Gautier has added to this list of constituent elements which are accessory, and at the same time universal and normal, of the atmosphere, viz. a new element—the free hydrogen.

IV

The discovery of free hydrogen in the normal air was the outcome of delicate analyses, of which the interpretation, on the other hand, did not present any uncertainties or difficulties. In truth the demonstration could be happily completed, if the separation of Hydrogen in pristine condition from the air was brought about by physical means such as diffusion. Its isolation is not possible to the degree of dilution it exists in, and we must be content to make use of indirect means.

The means employed by M. A. Gautier consisted of simply doing the *ensemble* of combustible gases contained in the air. In the list of the accidental components of the atmosphere we mentioned, a little while ago, some substances liable to take fire by contact with oxygen : oxyde of carbon, the formine or marsh gases other than hydrocarbures. But they relate to the impure air of towns. The atmosphere of the country, as will be seen presently, does not contain oxyde of carbon in a sensible proportion. The operation, consequently, simplifies itself ; and we have to do only with the components of the hydrogen and the carbon.

In order to find out the composition, dry air, deprived of its carbonic acid, is made to pass over

a column of oxide of copper heated red-hot, and the formation of carbonic acid and water is verified. This is the proof of the fact that the oxygen of the copper had burnt the carbon and the hydrogen. The proportion of the two gases deduced from the operation comes nigh to that of the gas of the marshes; but the hydrogen is superabundant. And as, on the other hand, there is no hydrocarbure richer in hydrogen than the gas of marshes, this excess of hydrogen bears witness to the fact that the gas existed, in part, in a free condition.

The proof had been tested in the midst of the woods, in the very middle of the month of July, that is to say at a moment when the dryness of the soil excluded the possibility of any fermentation capable of altering the composition of the air and of introducing into it this hydrogen, the existence of which the analysis disclosed. It was repeated on a mountain. The air collected on the rocky and sterile soil of one of the plateaux of the Canigon at an altitude 2200 metres, furnished a similar result, only it was much more clear. On this occasion they only found an insignificant quantity of carbon and consequently, of hydrocarbures; there was, on the other hand, a notable excess of free hydrogen.

A last proof remained to be tested. The sea-air blowing from the ocean, and far from every vestige of vegetation required to be analysed. The experiment took place at the Roches-Douvres light-house, on a granite, sterile rock, situated to the north of Paimpol 40 Kilometres in the sea, off the Breton coast. The result was conclusive: the air contained hardly any traces of carbon, but, on the other hand, it held hydrogen in almost a pure condition. One hundred litres of air furnished 19^{cc} 45 of it. This is a quantity which very nearly approaches two-thirds of carbonic acid.

Hydrogen is then one of the normal constituents of atmospheric air: a universal permanent element, which was liable to change only as regards the ratio of its proportions; and even then these changes are insignificant.

As to the origin of this new constituent of atmosphere, M. A. Gautier thinks that it was due to subterranean reactions. Hydrogen often issues out of the soil at the same time as the gases do from marshes. In the *fumerolles* of the volcanoes of Iceland, Bunsen had found it at the rate of 25 per centum. M. Fouqué found it included in the composition of the lava of Santorm, and in that of almost all primitive rocks, with carbonic acid, oxide of carbon, marsh gas and azote.

It is now easy to confront polluted air of a great city like Paris, with the normal type of air, and to judge therefrom the extent of vitiation impressed on it by conditions of social gathering. In short one is able to appreciate the dangers and the inconveniences resulting from it.

Marine atmosphere offers to us, in some proportion, the natural standard. The air of the country presents accidental and superadded elements. The marsh gas or methane begins to show itself side by side with hydrogen; and with it other hydrocarbures richer in carbon. These latter are evidently the outcome of the emanations and mucky fermentations of the soil. The presence of these carbures had not entirely escaped the observations of the chemists who preceded us. Boussingault, who should always be cited in studies of this kind, had remarked the existence of a hydrogenized gas, which might be a carbure and which Messrs. Muntz and Aubin have clearly designated the gas of the marshes.

If we come to the question of the urban atmosphere, we will still discover in its composition hydrogen and the marsh gas; but, side by side with this latter, we will find other carbures of hydrogen, richer in carbon than the analysis is likely to come near to the benzene or neighbouring aromatic bodies as to their centesimal constitution. In short, we will see the presence of oxide of carbon and other very rare gases, like the cyanhydric acid. This last body or element was observed by the Russian chemist, Laktine. He found it in the cyanuric condition in the soot produced by wood fires.

The presence of oxyde of carbon in the air of streets and houses presents a certain importance. It bears witness to the chief cause of the vitiation of respirable air, viz:—the combustion taking place in the domestic and factory furnaces.

In ordinary conditions, this oxyde of carbon only exists in very small proportions. The discovery of this gas in the atmosphere, where we have seen it exist in a very high condition of dilution, mixed in the proportion of 1 to every 1,00,000 times its volume of air, necessitated the creation of very delicate analytical methods.

The procedure, to which they had recourse for determining the oxyde of carbon in the smoke emitted by the furnaces was that invented by the French Engineer, Orsat. The oxyde of carbon is absorbed in introducing the whole of the gas into a vase filled with chlorure of copper in chlorhydric solution, with a spiral of copper attached. This method has now been brought to perfection by the exertions of different experimentors, and in particular by M. de Saint—Martin. But, to be exact or definite, it suits the purpose, only for the analysis of a mixture rich in oxyde of carbon. The procedure is quite unfit to characterise the gas to the dose of some ten-thousandths or hundred-thousandths in the air vitiated by the products of incomplete combustions. M. A. Gautier has substituted for it a way which is infinitely more delicate. It serves to reduce iodic acid from oxyde of carbon and it doses the free iode. Thus one is able to recognise very easily a one hundred-thousandth or even a lesser fraction of a poisonous gas.

Two facts come to the surface from these analyses: In the first place, the air of towns nearly always contains a little proportion of oxyde of carbon; and in the second place, this quantity is eminently variable according to circumstances, we believe with the vicinity of smoking and imperfect furnaces.

These results indicate the mean terms of 0 cc, 21 in one hundred litres of air, in other words,

of $\frac{2}{100,000}$ 'hs. In Paris, one finds in the air of a well-ventilated quarter, such as the one in which the school of medicine stands, nearly two litres of oxyde of carbon to every million litres of air. Or again, 2 centimetres cube to every cube metre of respirable gas. These quantities are extremely insignificant,—and one might well give vent to his astonishment thereanent so much the more as the warming of the habitations or dwellings throws into the streets a quantity, relatively considerable, of this gas. M. A. Gautier estimates it at $7\frac{1}{2}$ litres per diem to every square metre of the surface.

Is this minimum quantity in a position to react on the public health?

It is for physiology and the science of medicine to answer this question.

V

The knowledge of the composition of air has been one of the first preoccupations of nascent chemistry. Even now, when the science of chemistry has been so greatly developed, it is its task to complete the work it essayed to perform in the beginning, by determining the elements, whether permanent or accidental, which had struck the sagacity of the first investigators. The discovery of hydrogen in the atmosphere of inhabited localities of fields, of mountains, and of the sea is a work of chemistry, pure and simple: and, likewise, the verification of the presence in very small proportions of oxyde of carbon in the atmosphere of towns. But is it not a fact that these discoveries have been, in some sort, prepared and announced by physiology? Hydrogen was first noticed in the blood of animals. It is now some years since M. Grehaut noticed in the blood of a dog traces of a combustible gas; he made known, in 1894, that this gas was hydrogen; and he fixed its proportion at 0 cc 2 to every hundred centimetres cube of liquid or flowing blood. On the other hand, Messrs. Desgrez and Nicloux and M. de Saint—Martin discovered, in the same organic liquid, a weak dose of oxyde of carbon (1 cc 3 per litre;)

and, they came after some hesitation, to recognise that this gas, always present in the blood of animals used by the laboratories of Paris, made itself scarce when sought for in the blood of animals living far from urban agglomerations. Now liquid blood is, in its passage across the pulmonary membrane in relations of reciprocal exchange with the atmospheric liquid: the gases of the blood are also the gases of the air; the which exists in one should also be found in the other; and the learned researches of M. A. Gautier have verified this inference.

Besides, as regards the oxyde of carbon, the history of this gas is bound up with that of physiology itself. It was in 1857, the object of a very exquisite study by Claude Bernard—one of those studies which are proposed to be set up as models. And it is a fact that the illustrious physiologist has had in this instance, although in a very restricted field, the good fortune, which fell to the lot of Lavoisier once, of reducing to chemistry the manifestations of animal respiration and warmth. He has carried on the analysis of the vital rôle or functions of the oxyde of carbon, even to the confines of the physical world. There a period is put to the ambition of the biologist, because it is the end and aim of his mole or part.

We do not repeat here this lucid exposition of the mechanism of poisoning by oxyde of carbon, but only its result. The action of oxyde of carbon leads itself to the question of chemical combination with the colouring matter in blood the hemoglobine. The gas displaces oxygen whose place it fills, volume per volume. Every particle of blood thus attacked is annihilated; it is lost for all purposes of organic combustion, which is the source of all vital energy.

It is for this reason that the oxyde of carbon is a redoubtable poison for man and the beasts which surround it. It gives place to continual accidents. It is the agent of death by charcoal, that is to say, by the emanations of chafing dishes, stoves, furnaces, hot air stoves, lime-kilns, and fire-sides or hearths,

In a dose quite inadequate to kill, it engenders morbid disorders, often unknown in their cause, which affect the whole of the mechanism of economy and particularly the nervous system.

And now, we ask, with M. A. Gautier, if the weak proportions in which it is found in urban atmospheres—of course, beyond the immediate vicinity of the firesides of direct emanations—makes it really and truly injurious.

There is no doubt that the prolonged or repeated action of little doses does not give rise to troublesome after-effects. Head-aches, vomitings, the vertigo, accidents of cerebral anæmia, and neurotic ailments, are the common symptoms of all those who expose themselves to oxy-carbonic emanations. If a being breathes air containing only a millieme of the poisonous gas, a half of his blood loses, within 30 minutes, its oxygen, and thus becomes useless for repairing the wear and tear of tissues. With very feeble doses the absorption is less, and soon ceases to make any progress. It is, nevertheless, sensible of recognition even with the mixture of a 20 thousandth.

If the ventilation is bad, it has been remarked the toxic effect is aggravated. "I will not be surprised," wrote M. de Saint-Martin, "if the presence of some 10,000ths of oxyde of carbon sufficed to make a close or confined atmosphere deadly for a man passing there several hours in sleep." One knows the anæmia of cooks, stokers, ironers, the workmen who work on a furnace, the small establishments who do their cooking on cast-iron stoves, the coachmen who sleep in their vehicles without removing their foot-warmers, etc., in a word, all the multitude of persons who dwell in rooms with ill-ventilated fires.

We should distinguish, in all respects, strong doses from feeble ones.

As to the strong doses,—and a dose superior to 1 per 1000 is a strong dose—it is the rule laid down by Claude Bernard which holds in this case Oxyde of carbon accumulates in the blood: and

it leads to the complete, total, and rapid displacement of the oxygen, whose place it fills volume per volume. Death comes almost like a thunder-bolt from the blue. A dog does not resist for more than twenty minutes the action of air which contains a hundredth part of the toxic gas.

With feeble doses it is not the same case or, to express it better—when the quantity and tension of the gas diminish in proportion to those of oxygen, it establishes a chemical equilibrium between them and the hemoglobine. This is a point which has not been sufficiently noticed: oxygen exercises a considerable influence on the effects of oxyde of carbon, when its quantity and its pressure increase notably in proportion to those of the other gas. It is not correct to believe that if the oxyde of carbon could dislodge the oxygen in the blood, the latter is therefore incapable of doing the same thing by the former. It can do so (displace oxyde of carbon) if it is in a strong majority. This was already foreseen, in 1872 by Donders and Podolski, and by Claude Bernard himself.

Oxyde of carbon does not remain fixed, indefinitely in the blood: it disappears; it gives place to oxygen; the invalid is restored to health. The inhalations of oxygen justified themselves, therefore, in theory, in the cases in which the toxic dose was feeble and the progress of the intoxication slow. It was the universally extolled therapeutic method.

It is the procedure, strengthened by the use of compressed oxygen, that the learned Italian physiologist, M. Mosso, has brought to light again. He has been able to bring back to life animals whose breathing had ceased, and whose hearts had stopped throbbing, under the action of feeble doses of the toxic gas. On the other hand, consulted by the minister of Public Works in Italy, on the best means to put a term to the accidents which killed, in the long Alpine tunnels, the mechanics, stokers, firemen, etc., the learned biologist strongly recommended the injection of compressed oxygen in the furnace of the machine in order to suppress completely the gases and the smoke. The employees of trains, particularly those running on the line between Genoa and Ronco, who were subject to vertigo, sensorial aberrations, and syncope, are henceforth protected from all similar accidents. Thanks to this method.

K. K. ATHAYALE.

AN IDEAL INDIAN EMPEROR. *

ACCORDING to the original plan of the "Rulers of India" series, a volume on "Asoka" by Professor Rhys Davids should have been the first in the series, but "unfortunately circumstances prevented the fulfilment of that intention, and the series, was closed leaving vacant the niche destined for the great Buddhist emperor." Mr. Vincent Smith deserves thanks for undertaking the task and thus making the series complete. It would have been a great pity if the great Buddhist emperor found no place in the series. He was an ideal ruler who made it the mission of his life to do good to his subjects and promote righteousness among them, and it is but fitting and proper that in a series devoted mainly to describe the work of great rulers, and administrators, the career of an ideal Indian emperor of pre-Christian days should be described. The modern Englishman who reads the Rulers of India series and is apt to think too much of the "white man's burden" in India, may profitably recall to his mind the achievements of an emperor like Asoka. A study of his life and career may also tend to dispel the popular impression in the minds of some critics that there had been neither an "empire" nor "emperor" worth speaking of in ancient India.

The foundation of the Maurya empire was laid by Chandragupta, who assembled and organised from the predatory tribes of the north-western frontier of India a powerful force with which he expelled the Greek rulers who succeeded Alexander the Great. Chandragupta made himself the first emperor of India. After twenty-four years of strong government, he died transmitting the empire he had won, to his son, Bindusara. Bindusara, who reigned for twenty-five years. He was succeeded by Asoka, his third son. Much is not known of the early years of his life. It was in the ninth year of his ascending the throne of Pataliputra that Asoka undertook the conquest of the Kingdom of Kalinga on the coast of the Bay of Bengal and succeeded in conquering it. The horrors of the war seemed to have produced a deep impression on the emperor's mind and it is interesting at this moment to read what Asoka has recorded on the rocks in imperishable words of the sufferings of the vanquished and the remorse of the victor. As Mr. Vincent Smith observes, the re-

* *Asoka*. By Vincent A. Smith. M. R. A. S., "Rulers of India Series," Clarendon Press, Oxford.

oed is instinct with personal feeling and still carries across the ages, the moan of a human soul.

The loss of even the hundredth or the thousandth part of the persons who were then slain, carried away captive, or done to death in Kalinga would now be a matter of deep regret to His Majesty.

Although a man should do him an injury, His Majesty holds that it must be patiently borne, so far as it possibly can be borne.

Even upon the forest tribes in his dominions His Majesty has compassion, though advised to destroy them in detail, and though the power to harry them is in His Majesty's hands. They are warned to this effect: "Shun evil-doing, that ye may escape destruction." For His Majesty desires for all animate beings security, control over the passions, peace of mind and joyousness.

And this is the chiefest conquest, in His Majesty's opinion, the conquest by the Law of Piety.

Mr. Vincent Smith accepts this edict as the only authentic account of the reasons which induced Asoka to adopt the Buddhist *dharma* or law of piety as the rule of his life and the foundation of public morality. He rejects all the grotesque and contradictory tales told by monkish romancers as explanations of the great emperor's joining the Buddhist community as a lay disciple. Asoka's zeal for the propagation and enforcement of the practical moral code of Buddhism or Law of Piety led him not only to adopt within his own vast dominions his measures of reform, but also to engage in a well-considered scheme of missionary effort abroad. He sent preachers to Ceylon and the independent kingdoms in the south of the Peninsula, to Mysore and the Bombay coast, to the Mahratta country, to the Mountaineers of the Himalayas and Kashmir and to Pegu. This despatch of missionaries by Asoka, Mr. Smith points out, is one of the facts of primary importance in the history of mankind. The transformation of a small local sect into a world religion is the work of Asoka alone. Herein we have the true ideal of imperialism.

We proceed now to a description of the ideal which guided Asoka. A study of the edicts furnish several summaries of the Dharma or Law of Piety on the establishment and propagation of which the king had set his heart.

All men are regarded by the sovereign as his children, owing him filial obedience and entitled to receive from him a parent's care. Every man is bound to cultivate the virtues of self-control, purity of mind, gratitude and fidelity. On the other hand, he should abstain from the vices of rage, cruelty, anger, pride, and jealousy. He should constantly practise self-examination and be strictly truthful. Great stress is laid on the imperative duty of respecting the sanctity of all animal life and treating all living creatures with kindness. Obedience to father and mother is declared to be essential, the aged are to receive due reverence from the young, and the teacher from the pupil. Relatives, ascetics, and Brahmins are to be treated with decorum; and servants, and even

slaves, with kindness. Liberality must be shown to friends, acquaintances, relatives, ascetics, and Brahmins. All sects and creeds are in fundamental agreement about essentials, and all alike aim at the attainment of purity of mind and self-control; therefore, he who follows the path marked out by the Law of Piety must abstain from speaking aught evil concerning his neighbour's faith.

Supplementary instructions addressed to the royal officers in their official capacity point out:—

The ideal official should be free from envy, harshness, and impatience. Perseverance and the firm determination to resist all temptations to indolence or discouragement are the root of success in the performance of official duty. Officers are warned that they cannot hope for the favour either of heaven or of their sovereign if they fail to comply fully with his commands, and the officials in the conquered province of Kalinga are censured for a partial failure in the execution of the duties laid upon them.

One of the most noticeable features in the teaching of the great Buddhist emperor was his enlightened religious toleration. He did honor in various ways to Jains and Brahminical Hindus, as well as to Buddhists. While he lavished his treasure on Buddhist shrines and monasteries, he did not hesitate to devote large sums for hewing out of hard granite spacious cave dwellings for the Brahminical Ajivika ascetics, and there is evidence that the Jains too shared his bounty.

We now proceed to give an account of the extent of the great empire, which Asoka governed and the machinery of his government and administration. His empire comprised all India proper from the twelfth degree of latitude to the Himalayas, and included the valley of Nepal, the valley of Kashmir, the Swat valley and adjoining regions, the Yusufzai country, Afghanistan as far as the Hindoo Koosh, Sind and Baluchistan. For an account of the organisation of Asoka's empire, Mr. Vincent Smith relies chiefly on Megasthenes' account of the institutions of Chandragupta which his grandson preserved intact although supplemented by some novel institutions and modified by certain reforms. The king's power was absolute and all institutions depended on his will. The emperor communicated his orders to the lieges through the agency of a bureaucracy at the head of which stood the Viceroy, generally sons of the other near relatives of the sovereign. Four such viceroys were employed by Asoka. The home provinces were administered by local governors acting under direct orders of the emperor. The officials next in rank to the Viceroys were the *Rajukas* or Commissioners, 'set over hundreds of thousands of souls.' Below them were the *Pradesikas* or District Officers, Magistrates

in general were designated by the term *Mahamatras*, and this generic term, in combination with determinative words, was also applied to special departmental officers, as, for instance, the Censors of the Law of Piety, who were known as *Dhammanahamatras*. These Censors, who were for the first time appointed by Asoka in the fourteenth year of the reign as recited in the fifth Rock Edict had instructions to concern themselves with all sects, and to promote the advance of the principles of the Law of Piety among both the subjects of His Majesty and the semi-independent border tribes of Yonas, Gandharas, and others. They were directed in general terms to care for the happiness of the lieges, and, especially to redress cases of wrongful confinement or unjust corporal punishment, and were empowered to grant remissions of sentence in cases where the criminal was entitled to consideration by reason of advanced years, sudden calamity, or the burden of a large family. The Emperor attached the highest importance to the necessity of being accessible to the aggrieved subject at any place and at any hour and undertook to dispose at once of all complaints and reports without regard to his personal convenience.

"I am never satisfied with the adequacy of my exertion or the promptitude of my decision of cases.

Work I must for the public benefit and.....the object of all my exertion is simply to acquit my debt to living beings, so that I may make some of them happy in this world and that hereafter they may attain heaven.

Though deeply interested in the promulgation of the law of piety, and the spiritual and moral welfare of his people, Asoka did not forget their material interests. Within his own dominions he provided for the comfort of man and beast by the plantation of shade-giving and fruit-bearing trees, the digging of wells, and the erection of rest-houses and watering places at convenient intervals along the high roads. He devoted special attention to the cultivation and dissemination of medicinal herbs and roots, both within his own dominions and in the territories of friendly independent sovereigns. We read of an irrigation department, which performed functions similar to those of the analogous department in Egypt, regulating the rivers and controlling the sluices so as to distribute the canal water fairly among the farmers. The long inscription of Rudradaman, executed in A. D. 150, records how Tushasp, the Persian Governor of Saurashtra (Kathiawar) on behalf of Asoka, constructed canals and bridges to utilize the water of the great artificial lake at Gernar which had been formed in the reign of Chandragupta.

The account of the administration of Pataliputra, the great capital city which stood at the conflu-

ence of the Son and the Ganges is highly interesting. The metropolis was administered by a commission of thirty members divided into six Boards with five members each. The first Board was charged with the superintendence of the industrial arts and artisans. The second was entrusted with the duty of superintending foreigners, and attending to their wants. This Board provided medical aid for foreigners in case of sickness, with decent burial in case of death, and administered the estates of the deceased, remitting the net proceeds to the persons entitled. The same Board was also bound to provide proper escort for foreigners leaving the country. The third Board was responsible for the registration of births and deaths, which was enforced both for revenue purposes and for the information of the Government. The fourth Board was the Board of Trade, which exercised a general superintendence over trade and commerce, and regulated weights and measures. The sixth Board was charged with the duty of levying a tithe on the prices of all articles sold.

A few words may be said regarding the organization of the army. The standing army, maintained at the king's cost, was formidable in numbers, comprising, according to Pliny, 600,000 infantry, 30,000 cavalry, and 9,000 elephants, besides chariots. The war office was directed by a commission of thirty members, divided into six boards each containing five members, with departments severally assigned as follows: Admiralty, transport, commissariat, and army service, including the provision of drummers, grooms, mechanics, and grass-cutters; Infantry; cavalry; war-chariots; elephants.

It is stated that the arms when not in use, were stored in arsenals, and ranges of stables were provided for the horses and elephants. Chariots when on the march, were drawn by oxen, in order to spare the horses. Each war-chariot which had a team of either two or four horses harnessed abreast, carried two fighting-men besides the driver. The chariot used as a state-conveyance was drawn by four horses. Each war elephant carried three fighting-men in addition to the driver.

We may fittingly conclude this review of Asoka with the following edict :—

Whatsoever exertions His Majesty King Priyadarsin has made, all are made with a view to the life hereafter, so that every one may be freed from peril, which peril is sin. Difficult, verily, it is to attain such freedom, whether a man be of low or of high degree, save by the utmost exertion and complete self-denial, but especially difficult it is for the man of high degree."

BHARATA.

THE RAMZAN ROZA.

From a personal glance over the list of the contributors to the Indian Review I understand that the periodical has some circulation in Europe. It was this fact that weighed much in my mind when I read the article "The Ramzan Roza" by Mr. S. M. Natesa Sastri B.A., M. F. L. S. which appeared in the February number of this Review. I was not a little astonished to see that a Brahmingentleman should have rushed into print on the tenets of the Muhammadan religion, without assuring himself of the authenticity of his information. He has done it, and the consequence is that he has not only misinformed the European readers of the Indian Review but has also done gross injustice to the religion itself. I shall now proceed to point out his errors and omissions.

He says "the ninth month—Ramzan—is devoted to fasting, because it was the month in which the writing of the Koran was completed." This is fallacious, because the word "devoted" implies creation by man, and I must most strenuously oppose the propagation of such a belief. The fixing of the ninth month was purely an ordinance of God given to the prophet Muhammad; it was not the creation of any mortal being at all.

Again, the readers are informed that in the Prophet's first interview with God he (the Prophet) was ordered "to preach to the world that every Mussulman should observe five times *Namaz* (Prayers) daily." This is quite incorrect. In the first interview the Prophet was ordered by God to enjoin *fifty* times *Namaz* but not *five* times. This fifty was reduced to five times by God by instalments; that is to say, the Prophet had to go *nine times* to God on the persuasion of Musa (Moses), and each time God was pleased to alter the injunction by reducing the previously conceded number by five. The Prophet declined to go back to God after the ninth interview although he had been persuaded by Musa (Moses) to do so in order that he might get the last five still further reduced. The Prophet felt ashamed to beseech God for further reduction, and considering that five was not too many he came down to Mecca from Heaven and enjoined *Namaz* five times daily.

A very serious blunder Mr. Sastri makes when he says that every Mussulman is allowed "to take food once between 3 and 4 A. M." during Ramzan. The fast is not so rigid as he has pic-

tured it to be. Every Mussulman can partake freely of any sort of food *any number of times* between sunset and "the first opening of the gorgeous east." What a gulf of difference, indeed, there is between Mr. Sastri's version and the truth.

I cannot but regret that Mr. Sastri should have made bold to assert that a Mussulman "must not sleep in the same room with his wife." Will he kindly quote his authority? Mr. Sastri's assertion, I need hardly say, carries with it its own condemnation, for how is it possible to separate the husband from the wife who, being poor, live in a hut which is their drawing-room, dressing room, dormitory, kitchen &c. According to Mr. Sastri if they are not separated, they must be said not to have kept the Ramzan though they might have fasted ever so rigidly, and said their prayers ever so devoutly, even as devoutly as God himself could have wished it. The doctrine on the contrary, is that the husband may bed with his wife but only within the hours of sunset and the first streak of dawn; and in the day time the pair may sleep in the *same room* but *not* share the same bed.

"It is believed" says Mr. N. Sastri, "that the good results of the Ramzan fast "never accrue until the alms-giving at the rate of a seer and a quarter for each soul is "gone through." It is not so. The giving of alms during Ramzan feast, which is called *Fitara*, is compulsory only when the giver can command the next meal and not otherwise: this is the *Shafi* doctrine. If that were not the case, then every *Fakir* must forego the only meal he gets by begging, lest his one month's fasting and prayers may go in vain. Mr. N. Sastri's doctrine (for so I must call it) is, to say the least of it, absurd.

That every "capitalist owning a capital of Rs. 50 and upwards is enjoined by the *Koran* to distribute 2½ per cent. of his capital as alms to "the poor," is also incorrect. The rule is that every Mussulman who has continuous possession for one complete year of fifty-two tolas and upwards of silver or two tolas and ten annas weight of pure gold is bound to give *Zakat* at 2½ per cent.

Lastly, the chief preparation of the Ramzan feast is not milk and plums as described by Mr. N. Sastri but milk and date as the very name of the preparation *sheer khurma* implies.

MAHAMMAD ABUL HUSSAN.

The World of Books.

With the Royal Tour, by E. F. Knight.
Longmans, Green and Co., (Colonial Library.)

This is a narrative of the recent tour of the Duke and Duchess of Cornwall and York to Greater Britain. The book is in main a reprint of the letters written by Mr. Knight to the *Morning Post*, from the various places visited by the Prince and Princess of Wales. The royal personages travelled over 40,000 miles, 30,000 of which were by sea, and it is significant they did not set foot on any land where the Union Jack did not fly. Mr. Knight bears testimony to the spirit which prompted the warm welcome to our future King and Queen. Indeed, he says, his narrative of the tour is a tribute to the loyalty of the Colonies, the important lessons of which, Mr. Knight observes, are to be taken to heart not by the colonials but by the people of Great Britain. "All the world over, our Colonials entertain a passionate love for the mother country. It is right that all Englishmen should reciprocate this feeling as, indeed, all those do, who know the colonies. In those broad lands of least horizons the men of our race seem younger in spirit, imbued with a more generous enthusiasm. One does not find in Australia that cynicism, that strange indifference to Imperial interests, which, but a few years ago, was so marked at home. The average Australian follows more closely what is taking place at the remote outposts of our Empire than does the average Englishman. The same may be said of the educated Indians also. Says Mr. Knight:—"The colonists look across the seas to the mother country with a deep affection that has something pathetic in it. Let Englishmen realise that whenever our colonies have displayed dissatisfaction with our rule and apparent disloyalty, ours has been the fault. When they desired closer union with us, chilly and often contemptuous were our replies to their advances." Mr. Knight's observations on the apathy and indifference displayed by Englishmen towards the colonials are equally applicable to India:—

Our successive Governments snubbed the colonies, thwarted their legitimate aspirations. Our statesmen and our philosophic historians did all they could to alienate the affection of our colonies, foretold with equanimity that in the ordinary course of things the colonies would one day separate from us, announced to them that they could cut the painter as soon as they liked, as we would gladly relieve ourselves of the responsibility of union with them. But this tour, following on the South African war, has so brought Englishmen

and colonials together that this miserable selfish state of feeling at home has, it is to be hoped, been made impossible for the future.

Mr. Knight lays stress on the fact that in the colonies the most democratic—nay, socialistic,—of institutions and opinions are consistent with the most fervent imperialism. He is proud that the colonials are more undoubtedly imperialistic than the Englishmen and that he met not a single pro-Boer in the course of the tour. One might be inclined to ask whether the imperial feeling of the colonials as described by Mr. Knight is an unmixed blessing. But this by the way. Mr. Knight's descriptions are very interesting. In particular, we may mention his account of Melbourne's magnificent welcome to the Prince and Princess, the opening of the Federal Parliament, Australia's Army and Navy, its Democracy, its Imperialism, its Cadet system, its system of Education—all these come in for a good deal of appreciation at Mr. Knight's hands. The book closes with the Prince of Wales' reply to the citizens of London when he and the Princess partook of the traditional hospitality of the city and received its warm and loyal welcome. The following is an extract from the Prince of Wales' speech:—

'To the distinguished representatives of the commercial interests of the Empire whom I have the pleasure of meeting here to-day I venture to allude to the impression which seemed generally to prevail among their brethren across the seas, that the old country must wake up if she intends to maintain her old position of pre-eminence in her colonial trade against foreign competitors. No one who had the privilege of enjoying the experiences which we had during our tour could fail to be struck with one all-prevailing and pressing demand—the want of population. Even in the oldest of our colonies there were abundant signs of that need, boundless tracts of country yet unexplored, hidden mineral wealth calling for development, vast expanses of virgin soil ready to yield profitable crops to the settlers. And all this can be enjoyed under conditions of healthy living, liberal laws, and free institutions, in exchange for the overcrowded cities and the almost hopeless struggle for existence which, alas! too often is the lot of many in the old country. But one condition, and one only, is made by our colonial brethren, and that is: "Send us suitable emigrants." I would go further, and appeal to my fellow-countrymen at home to prove the strength of the attachment of the Motherland to her children by sending to them only of her best.

"Tutorial Arithmetic."

Among the latest additions to "The University Tutorial series" published by Mr. W. B. Clive is the "Tutorial Arithmetic" prepared by Mr. W. B. Workman B.A., B.Sc. Head-Master of Kingswood School at Bath assisted by Mr. R. H. Chope B.A., one of the experienced teachers of the same institution. The volume is intended primarily for those who have already received some grounding in the subject.

SEPARATION OF THE EXECUTIVE AND JUDICIAL FUNCTIONS, by *Babu Prithvis Chandra Ray*. City Book Society, Calcutta.

Mr. Pennell's famous judgment on the Chupra case and the resolution of the Government of India thereon will still be fresh in the memory of our readers. Lord Stanley of Alderly whose sympathies with the Indian people are well-known, after perusing the records of the case, sent to a Calcutta friend a cheque for a hundred and fifty pounds with a request that a hundred pounds be given to Constable Narsingh as somewhat in compensation for the ill-usage he suffered at Chupra and for his failure to obtain redress for it. Lord Stanley further desired that the remaining fifty pounds be spent to publishing in a collected form the papers relating to the separation of the executive and judicial functions in British India. Lord Stanley's Calcutta friend entrusted the work to Babu Prithvis Chandra Ray, the well known author of "The Poverty Problem in India." Mr. Ray has collected together all the important papers on the subject viz., the late Mr. Manomohan Ghose's pamphlets, the memorial submitted to the Secretary of State for India by Lord Hobhouse and others, the memorandum of Sir Richard Garth prepared in 1893, the scheme of Mr. Romesh Chunder Dutt for the re-distribution of officials between the judicial and the executive, the later resolutions by the National and Provincial congresses and various other important opinions, statements and articles on both sides of the question. Mr. Ray has included Mr. Pennell's judgment on the Chupra case and three well-thought out and well-written leaders which appeared in the *Indian Daily News* of Calcutta. It would be an excellent thing if all the available literature on present day political and economic questions relating to India could be collected together in one volume as has been done so well by Mr. Prithvis Chandra in regard to the question of the separation of the executive and judicial functions in British India. After perusing all the literature on this much-vexed question, and remembering the fact that the present system has been condemned by a host of officials and judges and remembering also that an ex-viceroy who is recently dead described the proposed reform as "a counsel of perfection" one might well ask, why is the reform delayed?

The Literary Year Book. Mr. George Allen, 5/-

This publication is a distinct advance on its predecessors. The chief new feature is the *Directory of Authors* which has been compiled with great care. The book will be of great service to all, especially to authors, publishers and journalists.

WHAT IS WHAT! by *Harry Quilter M. A.* Sonnenschein & Co., 6/- net.

This book has been well-conceived, well-planned and well-done and we have no doubt that it will prove an excellent book of reference. Within the space of 1128 pages printed in small type the author has given us much useful hint and information, regarding a variety of topics athletic organisation, games, animals, the army, art, biographical and critical notes, education, finance, food and food-stuffs, government, law, literature, marine, medical subjects, professions and employments of practical life, religion, scientific subjects, manufactured articles theatrical, and musical subjects, information relating to all these is given in this book. We have no doubt that it will ere long come to be considered as the best reference book. The author states that the book is "a guide for to-day to life as it is and things as they are." A few hints given by him will show that the title is by no means pretentious. After dilating on the merits of the three great professions, the bar, the church and medicine, Mr. Quilter observes:—

No man should go to the Bar unless he is prepared to work and wait for at least five years, during which he will earn nothing; that no man should go into the Church without some private means or equivalent influences, unless he can be content throughout his life with a very scanty and insufficient income, one on which he can hardly dare to marry. And as regards the doctor, or the surgeon the facts are that he has, to a great extent, his fate in his own hands. Neither the clergymen nor the barrister can force their own merits on the world; the doctor has many chances of doing so, and if he is a *first-rate man*, the world will have him. For the clergyman then, a mild intellect and a contented mind, small hopes, and a comparative certainty of mean livelihood; for the barrister, keen intellect, hard work, much patience, an abundance of physical endurance and a life which promises great rewards to the few, and nothing to the many. For the doctor, success or failure, dependent upon himself rather than chance; success which may be delayed, but which can hardly fail to come, if he be in intellect or in industry above the average.

Among the anonymous contributors to the book, the author includes a judge of the Supreme Court in India. We owe it to him an exceedingly clear and concise account of India. It may serve to give an idea of the nature of this book if we give the main headings under which information in regard to India is given:—Administration, Growth of Empire, Native States, Products and Commerce, Climate, Army, Civil Service, Hospitals and Dispensaries, and Judicial system, the problem of the Feudatory States in India and the questions of fertility of the soil, the poverty of the people, the drain of wealth and the lack of employment for natives, these subjects receive a sympathetic treatment.

Madras Government Museum Bulletin,
Vol. IV. No. 2. With seven plates, Government Press, Madras.

We welcome this latest addition to the anthropological bulletins published under what may be called, the general editorship of Mr. E. Thurston, the indefatigable Superintendent of the Madras Government Museum. Its contents include an important note on the Dravidian Head, an interesting account of the Yanadis of Nellore and sundry other items brought together under the head of miscellanea.

In an early volume Mr. Thurston expressed the belief that the Dravidian head is of the dolichocephalic or sub-dolichocephalic type. An investigation of the heads of certain classes in the western portion of the Bellary district seems to militate against this view. He says "while the lowest classes—the Telugu speaking Malas and Madigas—possess heads of a sub-dolichocephalic type, in the remainder the head is either mesaticephalic or even sub-brachycephalic and attains the maximum index in a compact group of weavers and dyers—Rangaris Togotas, Devangas, Sukunales, and Sukasales." The problem of the South Indian cranium becoming thus unexpectedly complicated, it is of the utmost importance to demarcate, as Mr. Thurston says with precision, the tract through which the short broad type of the head prevails and the source from which it arises. Before this is done it is difficult to say anything definitely on the subject. But, perhaps, we might hazard a suggestion. In order to secure an average which can be as near the truth as possible it is necessary to examine so many heads as may be thought sufficient to warrant the general conclusion arrived at. In some cases 40 or 50 heads may be considered sufficient while in others even that is insufficient and much more so 30, 25, or 20 heads. This is especially the case when the ordinary and the hitherto ascertained type is disturbed in such varying degrees as Mr. Thurston's tables disclose. High cephalic indices of two or more heads in a particular class—would materially vitiate the correctness of the average arrived at and render the examination practically useless.

The descriptive account of the Yanadis is by Mr. Ranga Rao, who seems to have taken an intelligent interest in them. We hope that Mr. Thurston will at an early date supplement this account with anthropometrical measurements of Yanadis as he has already enriched it with a number of interesting photographs taken by his assistant Mr. Rangachariar M.A.L.T.

The miscellanea include various items interesting to the general anthropologist. The first is a note on the existence of convade or custom in accordance with which the father takes to bed and is doctored when a baby is born, among the Koratis, the Erukakas, the Kavaras, and the Kukke Koramers of Shimonga. Then follow notes on Albinos of Madras, earth eating in southern India, interesting in connection with Prof. Japp's recent article in this *Review*, Kathira people, Toda petition, Indian weighing beams, and the Marmans of Travancore. Altogether this number is as good as its predecessors and must find favour with anthropologists at home and abroad.

Relfe Brothers' Publications.

This well-known educational firm is making a laudable effort to make their publications more widely known in India. We have received some of their latest books for notice and among them may be mentioned the second part of "A History of England" by George Carter M.A., Headmaster of New College School. It deals with the period commencing from the reign of Henry VII and ends with the revolution of 1688. A useful feature of this publication is the short biographical sketches of the prominent characters of the period.

From the same firm we have received a little book entitled "One-hour exercises in English Grammar" by Mr R. Harris M. A. We have looked into this book and we find that the majority of the questions cannot be answered by means of a reference to a Text Book and the pupil thus thrown to some extent upon his own resources will have to rely upon an intelligent use of his own abilities. We have no doubt that teachers in Indian schools will find this book useful.

The House with the Green Shutters:—By George Douglas. Bell's Indian and Colonial Library.

A story of unmistakable power and originality. The author has a keen grasp of the elements that make up human characters in their myriad varieties, and the realistic touches and graphic development with which the characters grow before our eyes as fresh situations and events are marshalled one after another are so terrible in their intensity and logical justice, that the reader has no choice but to rush through the pages till the end which forms an appropriate finale to the pathetic life-story depicted therein of a tragic rough-diamond human character which was ruined by its own pride. The plot as well as the personal dealt with in the book form quite a departure from the well worn-out conventional line of the milk-and-water stories that have for a

time been flooding publishers' lists. Gourlay, the man with a will of his own, who made and finally destroyed himself, is a creation worthy of Shakespeare or Scott, and the wonderfully powerful sketch of the career of this character depicted in the pages before us reminds us of the happiest efforts of Zola or Balzac. The scenes and characters are laid in an obscure Scotch village. We have no doubt that more production from the fertile brain and versatile pen of the author will produce something like a revolution in the stock-in-trade of the ordinary everyday-novelist of to-day.

The Temperaments and Constitutional Defects considered in relation to Preservation of Health and Cure of Disease by *Ram Narain L. M. S. Punjab Medical Service (retired)* Price Re. 1—8.

If in the treatment of diseases, the enormous drugging that is practised by the physicians now gives room for a better and a more rational method, we may consider ourselves to have reached the millennium in medical practice. The author's previous work on the "Treatment of diseases by climate" is an attempt in this direction. The present work appears to be a complement of it, because, no work on the influences of climate can be considered complete without another which treats of the temperaments of human bodies on which the climate exerts its influence. The subject of temperaments has been relegated by modern medical men to the limbo of ancient quackery, notwithstanding the fact that its importance has lately come to be recognized by eminent physicians though few. The author therefore expects some adverse criticism, but he has fortified himself by quoting extensively from previous works, ancient and modern. This does not, however detract from the value of the work which has been written so clearly that any layman can understand it without much effort. The adage "prevention is better than cure" fits nowhere so well as in the case of preservation of health. If preservation of health is the sole end of all sanitary reforms, then this work may well be considered as intended to work for that end.

Tales of Indian Chivalry.

BY

MICHAEL MACMILLAN,

Principal of Elphinstone College, Bombay.

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Select Indian questions, by G. S. Mukadam.

THACKER SPINK & Co., CALCUTTA.

Poems, by Joseph Furtado.

Topics from Periodicals.

A MODERN HINDU SAINT.

The *Theosophical Review* for March contains a very readable article from the pen of Mr. Eric Hammond on the life and teaching of Ramakrishna Paramahansa, the greatest Hindu saint and mystic of modern times. He was born of poor Brahmin parents in the year 1833 in the village of Kamarpukur in the District of Hooghly. He was brought up in 'chill penury,' but in strict accord with the rules of life prescribed for his caste. While he was quite young, his father died. The boy was then sent to school, but after a short time he became convinced that the aim of all secular learning was mere material advancement, and he resolved to give up study and devote himself to the pursuit of spiritual knowledge. He was animated by an earnest spirit of enquiry and found it impossible to rest satisfied with the dry bones of the traditional lore. At the age of twelve he was invested with the sacred thread. An interesting story connected with this ceremony reveals the broad cosmopolitan spirit that stirred in his youthful heart and burst out in such splendour in his later years.

(1) "Discipline obliges the newly-invested with the sacred thread to beg his food at the hands of the women of neighbouring houses. Among the women who offer rice to the begging boy, the first from whom he begs is considered to hold, from that moment, a position of peculiar relationship to him. She is supposed to take the place of the mother of the boy during the period of his studentship. We are reminded that this village of Ramakrishna's birth contained very poor folk for the most part; among them dwelt one of the carpenter caste, whose wife, Dhani, loved young Ramakrishna so greatly that she urged him to beg first from her, and, despite the disapproval of his parents, he carried this point. Thus a woman of the carpenter caste became, as it were, the god-mother of a Brahmin boy. Apparently the inner humanity in the heart of the boy could not understand the narrowness of caste restriction. To him the lovable nature of Dhani did not appear marred in any way by reason of her belonging to the carpenter caste."

We next hear of him as priest of a temple of the Goddess Kali near Calcutta. Here in the temple, he thought and thought, and prayed and prayed. Here he gazed daily upon the image of Her who represented the female principle in the God-head. Before her he would lie prostrate, murmuring: "Mother! Mother! Art thou the Mother to whom men may come for hope, for love, for salvation, for all?" Here in this temple he became possessed by a conviction that in the motherhood of God lay a great and glorious factor in faith. He was married by his people to a girl-bride in the hope that by her beauty and grace he might be weaned

from too absorbing religious abstraction. But the hope proved vain. He never associated with his wife and looked upon her as he looked upon women generally as the incarnation of the Divine Mother. One day, his wife, wondering at his continued absence, wandered from the home of her own people, with whom after the manner of the land, she still dwelt, to the shrine of his deity.

Quaintly, naively, he tells her that he now sees how the Mother exists in every woman, for him—even in her, his wife. "You are, to me as an incarnation of Her whom I adore. . . . I would be as I am. I would worship always, I would learn more and more deeply of divine things. Yet, if you will, I am yours. Then, I must be as other men, of and for this lower life."

She bade him worship God in his own way, declaring that she would be no hindrance to that worship. Her desire for her husband should never stand between him and his God. She herself became one of his most devoted disciples always revering him as a divine being. Thus through his wife's consent the last barrier was removed and he was left free to lead the life he had chosen.

The next desire that seized upon the soul of this man was to know the truth about the various religions. In his determination to understand the inner meaning of the great creeds, their religious motives, their forms and regulations, he acquired and assimilated the good in each by actually conforming to and fulfilling the law of each. By indomitable perseverance he comprehended the essence of Divinity, the eternal Unity, alike in the Vedas, the Talmud, the Koran and the Bible. This conviction of the fundamental unity and harmony of all religions was the key-note of his teaching. Says Swami Vivekananda, one of his foremost disciples:—

"To proclaim and make clear the fundamental unity underlying all religions was the mission of my master. Other teachers have taught special religions which bear their names, but this great teacher of the nineteenth century made no claim for himself; he left every religion undisturbed, because he had realized that in reality they are all part and parcel of one Eternal Religion." Rama Krishna Paramahansa died in 1886 and left behind him a rich legacy of religious thought and example which are gradually spreading far and wide, in the West as well as in the East, softening religious animosities and breaking down barriers of caste and creed. His noble teaching is summed in one of his discourses which Mr. Hammond has turned into verse as follows:—

Would'st thou see God? Is it thy heart's desire
To gaze with eyes of thine

Into His holy eyes, nor fear their fire?
 To brook the light divine
 That falls and flashes from His faultless face
 Searching the inmost nook
 Of all thy being, with all-seeing look?
 Then, learn of me how thou may'st gain that grace.
 Would'st thou, indeed, see God? Could'st thou endure
 To stand, unrobed and bare,
 Body and soul, in His pure presence, sure
 And unashamed? There,
 Where knowledge dwells of deeds that thou hast done :
 And where thine every thought
 Into the radiance of His light is brought?
 Then, lo ! my lips point out the way. 'Tis one.
 One, and one only. Lo ! the path is plain
 Love not the love of life !
 Love not the world nor any worldly gain ;
 Play small part in the strife
 For fame or high estate ; but these disdain
 And hold them of light worth ;
 Then shalt thou learn the lesson of new birth,
 And, in His beauty, see the King—and reign.
 Thus, while within thee, one desire shall stay
 Of lesser, lower sort
 Than God Himself, thou can'st not trace the way.
 Awake ! Be not the sport
 Of petty passions little lusts or great.
 Lift up thy heart, and take
 Control of all thy senses, that they make
 No slave of thee their head ! Then fear no fate.

THE NATURE OF THE NERVE IMPULSE.

Prof. A. P. Mathews of the University of Chicago contributes a very learned article to the *Century Magazine* for March, giving an account of the researches recently made by himself and Prof. Loch into the nature of the nerve impulse. Here we find an attempt to give a physical explanation of the phenomena of life and to prove that the phenomena of living matter do not differ in kind from the physical phenomena of non-living matter. The main results of this article are as follow :—

First, that the chemical stimulation of protoplasm is really an electrical stimulation; second, that the poisonous action of inorganic salts is due to electrical charges of the salts and probably to the movements of these charges; third, that the negative charges stimulate protoplasm, while the positive prevent stimulation, and if not counteracted by the negative will destroy life; fourth, that muscle contraction is probably in its essence an electrical phenomenon and that the conduction of a nerve impulse is almost certainly an electrical phenomenon; fifth, for the first time we have a physical explanation, which agrees with all the main known facts of the nerve impulse and changes in irritability; sixth, we have secured a physical explanation of the way in which an anæsthetic produces its effect; seventh, we are led to the hypothesis of the identity of stimulation by light and by chemicals.

As to the practical results of these conclusions, Prof. Mathews says that the artificial formation of living matters is only a question of time and that the prolongation of life, is no longer a will-o'-the-wisp, but something entirely within man's power when his knowledge has been extended.

UNIVERSITY REFORM.

The current number of the *Educational Review* (Madras) contains, among other articles of educational interest, an interesting and instructive article on 'University Reform.'

The Rev. F. W. Kellett, of the Madras Christian College, who has 'no panacea to puff and no revolution to champion' believes that present movements as regards the Madras University are tending in the right direction. He says that Madras maintains a higher standard in its examinations and above all hopes that it will not be compelled to sink to the level of some of its sister universities in this respect. The learned professor is opposed to the institution of an Honours B. A. examination and says that the present course is practically an Honours course, all who pass in the first class or high in the second getting a real Honours degree. Mr. Kellett says that the scheme would be injurious to the cause of education and that the Pass candidates would be committed to a lower grade of teachers and that Baboo English and other depravations would flourish. Mr. Kellett is in favour of the establishment of the B. Sc. degree, if a satisfactory scheme can be drawn up and also in favour of the development of the University as distinct from the Colleges. In connection with the B. Sc. degree, the writer remarks :—

"The institutions of B. Sc. and D. Sc. degrees will involve laboratory equipment of a higher kind than is general at present. And if each College is to aim at such equipment, there will be no little waste of money. There will be perhaps five expensive laboratories for five to ten students, who would do better work in friendly emulation if gathered into one. It is here specially that most benefit may be gained in one or other or both of two directions in which the Viceroy is known to have been looking. Inter-collegiate arrangements might be made in some cases for these higher studies. Practical difficulties are probably insuperable as regards inter-Collegiate teaching in the normal work of the F. A. and B. A. standards as carried on at present. There seems no likelihood of any departure from the system of continuous class work, and this being so, students cannot take one lecture at one college and another elsewhere."

The writer calls the idea of establishing a new University away from existing Colleges 'utopian.' He adds :—

The University policy in South India is not to be one of *disiecta membra*, but of concentration.

First-grade colleges should be gathered at a few strategic points. Meanwhile as long as the present straggling form of the University continues, the Mofussil colleges should be well represented on the Senate and the clause in the Act of Incorporation which prevents Mofussil Fellows from voting in elections by proxy should be modified.

SRI SANKARACHARYA: HIS LIFE AND WORK.

The first number of the *Malabar Quarterly Review* contains, among other interesting articles, one from the pen of Professor K. Sundararama Aiyar, M. A., which, while giving an account of Sri Sankaracharya's life and work as recorded in the extant Sankaravijayas, offers explanations on doubtful points in the life and work of the great sage. Mr. Sundararaman begins by observing:—

In all ages of the world's history, social peace and unity have been maintained as the result of the beneficent working and sustaining power of great ideas and noble traditions which, while satisfying and elevating the highest minds of the community, can also be adjusted so as to comprehend the fetish-worshipping masses of men within the pale of an enlightened orthodoxy. The forces of disturbance and discontent are never absent, but are kept under restraint by the cohesive force and vitality of the predominating spiritual conceptions and ideals. The power of all truly spiritual ideas—the power, at least, of the underlying basis of truth which unifies all such ideas—is so great that in the end they bear down all opposition and triumphantly vindicate their claim to the allegiance of men. The trumpet-voices that proclaim them are hailed as the loftiest patterns of virtue and wisdom, as saviours of the race, as world-teachers, as the heralds of a happier and freer state of life,—because in the epoch which preceded their appearance storms of doubt and waves of discontent had violently agitated and disturbed the social organism and left behind them everywhere a debris of corruption and ignorance and a sense of desolation and despondency which unflinchingly comes upon men when they feel that they are left without spiritual guidance and that the eternal oracles have become silent once and for ever.

Sri Sankaracharya is said to be such a trumpet-voice whose object in appearing at a critical period of human history in India was to satisfy the deepest cravings and aspirations of the hearts of men and to regenerate society and set it once more on the luminous path which leads to freedom and peace.

In fixing the time in which the sage lived, the Professor starts from the universally admitted incident of the sage's life, to wit, his attack on Buddhism. He endorses Mr. Wilson's view that the origin of the Buddha persecution must not be attributed to Sankaracharya and says that his opposition to Buddhism must have been purely dialectical and "pole-mical" and must have been offered at a time when the greatest philosophers among Buddhists formulated and spread their several tenets and systems and not when Buddhism was on its decline. He concludes that Sri Sankaracharya refuted and discredited the philoso-

phical schools of Buddhism just when they flourished most and begun to get popularised and that this took place about the close of the first century B. C.

Sankaracharya had not only had to contend against heretic religions such as Buddhism and Jainism but also against orthodox schools of Vedic philosophy, the Sankhya, the Yoga, the Purvamimamsa &c., which were then contending for supremacy. Of this controversy and the results that flowed from it the Professor remarks:—

He was practically the first to set the example in this fruitful work of producing harmony and reconciling divergences. All other great Indian teachers have only followed his example. We do not say that he discovered or invented the system. What we mean to point out is that, after the immense breach in Indian spiritual continuity effected by the Buddhistic and Jain heresies had intervened Sri Sankaracharya was the first to revive the ancient and characteristically Indian method of preserving and promoting religious unity and harmony while still providing ample room for all the infinite variation there must be in the interpretation and explanation of the universe of spiritual existence. Those who use the language of sneer and sarcasm in speaking of India's religious differences do not know that all our sects equally believe that the eternal Vedas contain the divine revelation of the secrets of religion; that Isvara is the creator and preserver of the material universe; that this universe of nature was not created out of nothing, that it is passing through successive phases of evolution and involution and that this process is practically without beginning and without end; that all this infinitely and eternally-changing universe of phenomenal existence rests on the substantial and static basis of the Atman or Absolute Existence, ever pure, ever perfect, ever free; that spiritual perfection is a process of progressive realization of the divine being through successive states of probationary and preparatory soul-life in appropriate environments in different parts of the universe; and that every creed, sect, and religion must be accepted and tolerated as one aspect or stratum of the essential truth which is absolute, infinite and eternal. That all these ennobling and inspiring truths are now common to all Hindu sects, and that they are just the truths which are calculated to carry to thinking minds in the West new and unheard-of consolations and new conceptions regarding the universe and man's relation to it and to Isvara—are benefits which have directly flowed from the life and work of Sri Sankaracharya. India has remained substantially faithful to the great master and so to-day her mission in the world is chalked out by the enduring results of his labour and love for his fellow-men.

Sri Sankaracharya was as great a reformer of Hindu society as he was a philosopher. According to Professor Sundararama Aiyar, the very great reform that Sankara effected in his days consisted in prohibiting Saunyasas Asramam to women. Buddhism, also, in its mad rush after equality, allowed and even invited the gentler and frailer sex to form a fraternity of Nuns. Hence India abounded quite as much with Bhikshunis as with Bhikshus, and this only added another element of moral and social disturbance. It is needless to say

that here too our Acharya's work bore good fruit in the restoration of the healthy and time-honoured Hindu prohibition of the final Asrama to women.

With regard to the tradition which prevails in Malabar that Sri Sankaracharya promulgated certain rules, sixty-four in number which are called *Anacharams* or impure customs, the Professor observes:—

It is impossible in the nature of things that the untiring reformer of Indian morality in every other part of the Indian continent—the great preacher of the *Sadhana Chatushtaya* as the necessary preliminary for all attempts to investigate and realise the Atman—would have enjoined immoral ways of living on any section of our race, much less on the people of his own native land. In the second place, it is utterly impossible that an entirely new body of social customs can be introduced among a people at the initiative of a single legislator, however eminent and however powerful. An entire body of social rules and institutions can only be the growth of time and circumstances and never be made to order, and so the story that Sri Sankaracharya introduced these rules and usages must be utterly discredited. In the third place, all the Sankara Vijayas agree that he never went back to make prolonged stay in Malabar after leaving it in his youth, and so this story regarding the promulgation of these customs by him cannot be true. We do not desire to go into detailed criticisms of the authorities which are responsible for this story, as it is too transparently absurd and impossible to have the faintest chance of being accepted by any unprejudiced mind.

COMMERCIAL EDUCATION.

The fierce competition which is now besetting England from every side and the manner in which both Germany and America have been equipping themselves for a commercial struggle with England have led that country to make that self-examination which is the first sign of progress. Those countries while perfecting their industrial appliances have raised a body of commercial men who by their special education can deal with an organization of the most perfect character for a complete commercial propaganda. Germany has led and is still leading the world in commercial education. In this respect, it is an object both of admiration and envy. German manufactured goods, in the first place, are cheaper, and in some cases better, and German merchants adapt themselves entirely to the wants of their customers. Industrial commissions have been sent out to South America, South Africa, Mexico, Japan, China and other countries to study and report upon the conditions and needs of the people. German travellers are

superior in the technical knowledge of their branches, and are familiar with more languages than the representatives of other nations. "All this," says Dr. Jacks, President of the West of Scotland Iron and Steel Institute, "is due to training in special institutions in Germany? While there is a consensus of opinion as regards the need of commercial education, there is a good deal of difference of opinion as to the best method of imparting such education. A great deal has been said by men of ability and experience on the subject and the *Chambers's Journal* for this month collects, and publishes a select few of the more practical ideas. Dr. Jacks says that boys get better commercial training in a properly conducted office and in the splendidly equipped night-schools than they get in ordinary educational institutions. The defect is attributed to the elementary education afforded to boys in the ordinary educational institutions. Mr. John Mcmillan states "the elementary education afforded is so imperfect that many boys entering offices or warehouses write in a slovenly way; that their arithmetic is deficient, and that they are unable to compose a letter properly, and in some cases even to spell correctly." Another who had been forty years a manager of a firm says that he had never found a boy fresh from school and however well educated, who could add a column of figures quickly and correctly. The Edinburgh report defines commercial education as the whole course of commercial training for a business career, whether it consists of general education or education of a specialised nature bearing on commerce, and observes that in the elementary stage there need be no distinction in the training of a boy destined for business and of another who may look forward to a professional or literary calling. As to the value of a university training in this connection Dr. Jacks states that, as far as his experience and observation go, those who have had the benefit of Latin and Greek, and even a brief insight into the humanities, such as clergymen, lawyers and doctors, are in intellectual acumen, in power of thought, in soundness of judgment, or in any of the vital attributes of life, in no way superior to the thoughtful, well-read man who has not had the advantage of a university education. He considers that all that is required is self-denial, hard work, the possession of excellent native ability, and a sound constitution. In a contribution which he makes on commercial education to the March number of the *Canadian Magazine*, Professor John Cox of Mc. Gill University enters into the question of commercial education more directly. He says:—

"I do not advocate the foundation of Faculties of Commerce in our universities, nor do I

think there need be much change in the subjects taught in our schools in the interests of boys destined for business. And even so far as the teaching itself can be improved, from the point of view of business men by a return to reality and practical instead of traditional methods, it will be not less an improvement in the early training of those who are to pass through the universities into the professions, or take up the life of the scholar or scientific investigator."

Professor Cox finds some difficulty in grafting commercial education upon University work. First there is the economical difficulty. The time required for training in a Faculty of commerce would be grudgingly given as it would involve a continued expense instead of a gain which would result if a boy enters an office all at once. There is further the strongest feeling among business men that the boy must get over some of the drudgery and begin to acquire experience while still in his teens. Another is to name subjects which would rank with the other studies of a university and yet have a special interest for those aiming at a business career. But the main obstacle in the way of a successful faculty of commerce would be the difficulty of stuffing it with practical men of any authority in the business world. Professor Cox asks:—

"Is it conceivable that leading men of business would give time to conducting college classes as leading physicians and lawyers do? Would they not feel that to publicly allot a portion of their time to other work would be counted against them as business men? That such teaching as they could give would be given for better in their own counting houses? That much of the most valuable information they could import is, under the present competitive system of the nature of trade secrets, not to be published except at a price?"

He says "that while it is possibly a proof of public spirit to aid in training doctors and lawyers that they may never be wanting a supply of men fitted to pursue those humane and none-too-well paid callings, there is no obligation on any man to raise up competitors to cut his own throat."

He approvingly quotes the *Times* which says "professors holding chairs in a Commercial Faculty would be either those who had left business or still probably those whose business had left them."

Besides, there is still another difficulty, the rooted, or perhaps we should say the well grounded, prejudice of the business man that college life is not exactly the best forcing bed for those habits of punctuality, machine-like regularity, and faithful

attention to uninteresting details that are the prime virtues in the early stages of a business life. Professor Cox quotes his brother Professor Flux as regards the essentials in a candidate for commercial life from the business men's point of view.

"First, character as expressed in trustworthiness and a high sense of honour, independence and power of initiative, and formed habits of punctuality, regularity, accuracy, obedience. Second, trained faculties. Third, a well-developed physique. Only in the fourth place is mentioned the desirability of special knowledge. And it is agreed that such specialization must not in any case be secured at the expense of the general education now given, but must come later, and be continued in classes attended after leaving school in the evenings or during business hours."

All this, says Professor Cox, can be got out of the ordinary subjects included in the school curriculum and the discipline maintained by public schools.

AMERICAN POLITICS.

The *Arena* for March is as usual, a bright number, and most of the articles therein are of vital significance to the political and moral welfare of the United States. The leading article on "Experiments in Colonial Government" by Dr. Felix L. Oswald is an international study of colony-making. There are two other articles under the general heading "Cuba vs. the United States". The first presents the obligations of all enlightened Americans to offer sufficient inducements to Cuba to make her industrially self-sustaining. The second is an eloquent appeal to the national honor of the United States to rise above all selfishness in her political dealings with the Cubans. The problem of Immigration is the subject of another paper by Mr. John Chetwood. The competitive aggressions of the Chinese upon the labor market of the Pacific coast have created a problem of economics that threatens to bring about the re-enactment of the Chinese Exclusion Law and the writer urges some arguments in favor of it. Another contributor, Rev. C. Bryant however, shows that the cause of the congestion of our cities lies in the monopoly of natural opportunities or private ownership of the bounties of nature. Observes this writer:—

"Natural wealth is abundant, but these are the opportunities to get at the wealth, and they are owned by individuals and hence all their value goes to the owners." The owners say to their fellows, "Work for us and we will give you a share of what you produce;" or, which is the same thing, "Rent the opportunity and pay us a share of what you produce." But the working men

are abundant, and machinery enables a few to do the work of many; the unemployed offer to work for less, and the competition goes on till men are working for just enough to keep them alive.

Then the Chinaman appears—he can live on half as much as the white man. It is only natural that organized labour should demand his exclusion. But if organized labor were far-sighted it would demand, not the exclusion of the Chinaman from equal rights and privileges, but its own right to equal use of the opportunities to produce wealth. So long as God provided plenty of water, labor organizations would demand free opportunity for each man to dip for himself.

There is an old story about hunting for a mote in our neighbour's eye and failing to see the beam in our own eye. We are always blaming some poor Chinaman for our troubles when really the cause of them lies in ourselves alone.

INDIAN TEXTILE INDUSTRY.

Mr. Havell contributes to the March number of the *Dawn* a suggestive paper on the present condition of Indian textile industry. This is the second instalment of his contribution to that journal under the general title "The Industrial development of India." Mr. Havell starts by drawing attention to one or two points in the present condition of textile industry in India. The first is that the hand-loom industry in India has not been, in spite of its primitive condition, entirely crushed by the power-loom.

The introduction of machinery, no doubt has reduced their profits. The condition of the Indian weaver, he observes, is deplorable compared with the European weaver who, by simple contrivances has been able to increase the efficiency of labour by introducing the fly shuttle and the sewing machine. The Indian weaver does not receive even the help that goldsmiths, blacksmiths, &c., receive from their experience in shops. Every effort must be made therefore to improve the hand-loom mechanically. Native and European capitalists can't find a better field for investment than this department if they but had the good sense to see that India is more favorably conditioned than Europe where hand-loom reaps good fruits. Mr. Havell then

confutes the belief that in Europe the hand-loom industry has been displaced by power loom. Statistics show that there is a greater demand for skilled weavers than the supply. He then goes on to observe:—If the hand-loom can compete with the power-loom in England, where the cost of skilled labour is many times greater than it is in India, where the supply of trained weavers is very limited and where the most perfect weaving machinery worked by steam and electricity is in use, what a much greater prospect must there be for it in India where you have an unlimited supply of the most skillful hereditary weavers content with the earnings of four annas to eight annas a day?

To those who direct all these exertions towards the encouragement of export trade, Mr. Havell's advice is "first find out and remove, if you can, the causes that have led to the degradation of Indian art in India" and export trade will revive and expand almost automatically. That decay Mr. Havell attributes to the fatal policy of imitating modern European scholastic styles, in Indian public buildings, utterly disregarding living traditional styles of Indian architecture. Mr. Havell exhorts Indians not to wait for Government initiative in the matter and assures them that Government would hail with the greatest satisfaction any efforts on their part to rescue Indian art from the ruin which is overtaking it.

In the latest number of *The Madras Review*, the place of honor is given to an article on "Mysore and the Mahamadan Usurpation—a forgotten chapter of Mysore National History" by C. Hayavadana Row, B.A. The same writer contributes another interesting paper on "The Vijayanagar Empire and the Mysore Viceroyalty" to the current number of the *Madras Christian College Magazine*. The two articles display much research and throw a good deal of light on the ancient history of Mysore.

DEPARTMENTAL NOTES.

Educational.

THE AIM OF EDUCATION.

President William De Witt Hyde writes in the *Forum* on the true principles and standards of Education. He declares that the besetting sin of the higher education is its inevitable tendency to resort to devices which get something out of every body, instead of putting the best things into the few who are able to receive them. It is infinitely easier to get grammatical and philological results out of everybody than to impart literary taste and appreciation to anybody. The zeal to heap up new acquisitions of knowledge regardless of relative worth, sense of proportions, attractiveness of form or either esthetic or practical use shall no longer be accepted as sure indications of scholarship that will suit the twentieth century. "It is just beginning to dawn upon us", continues the writer, "that a grain of inspiration is worth many ounces of information; that an ounce of comprehension is worth many pounds of aggregation; and that a single pound of art is worth many tons of science."

According to President Hyde, the aim of education is to fit one for three things: (1) to earn one's living by the exercise of trained power; (2) to support the institutions of society by intelligent appreciation of their worth; and (3) to enjoy the products of art and civilization through the cultivation of imagination and taste. President Hyde sketches the returns of college life in these words:—

"To be at home in all lands and all ages; to count nature a familiar acquaintance, and art an intimate friend; to gain a standard for the appreciation of other men's work and the criticism of one's own; to carry the keys of the world's library in one's pocket and feel its resources behind one in whatever task he undertakes; to make hosts of friends among the men of one's own age who are to be leaders in all walks of life; to lose oneself in generous enthusiasms and co-operate with others for common ends; to learn manners from students who are gentlemen, and form character under professors who are Christians."

THE IMPERIAL ANGLO-INDIAN ASSOCIATION.

Lord Curzon sometime ago declared that the education of the domiciled European community as compared with that given to British lads in British public schools is so much below the mark as to justify the Government of India in its absolute proscription of European youths in India from the higher services of the State in this country. At the recent annual meeting of the Imperial Anglo-Indian Association opportunity was taken by the Chairman, Dr. J. R. Wallace, to protest against the policy of the government in regard to the domiciled European community. Dr. Wallace

proceeded to maintain that it has blasted their prospects in the past and that their protestations against it were not treated with consideration. In the face of their present disabilities, the duty of the government, is to frame the European Education code as the exact counterpart of some recognised English Educational corporations, such as the Cambridge University with its system of recognised public examinations especially when it has been maintained that the education at present imparted to the community is faulty and that the English Public School Education alone furnishes the best materials for the State services of this country.

ART-TEACHING.

In the course of his evidence before the University Commission, Mr. Havell, Principal of the School of Arts, Calcutta, suggested the following means to develop, indirectly, the aesthetic faculties of the students:—

A comparatively small expenditure from the college library grants yearly would make the walls both attractive and instructive. There are now very many excellent and suitable illustrations of the finest examples of Indian and Oriental art published both in India and in Europe, which could be nearly framed and hung round the walls of the class-rooms at very small expense. A special selection suitable for the purpose could easily be made by the Educational Department. Every drawing teacher now sent out from the Calcutta School of Arts has some knowledge of ornamental design and if encouraged by the college authorities, he and his pupils could with the expenditure of a few rupees in colors, relieve the monotony of the white-washed walls led painted or stencilled decoration. As regards direct art teaching Mr. Havell thinks that it is very desirable that students should have Indian examples of freehand instead of the European which are now prescribed. It might not be possible to make drawing a compulsory subject. Drawing was made compulsory in the High Schools of Japan about 15 years ago. It is dangerous for India to remain 15 years behind Japan in matters of technical education, but of far greater importance to the future of art in India is the training of the Engineers who in this country carry out nearly all the most important architectural works. It is my firmest conviction that the prosperity of most of the art handicrafts of the country depends upon the possibility of keeping alive the traditions of Indian architecture which still exists. Indian architecture is now studying only from an Engineering point of view and Mr. Havell observed that it is of vital importance to the future of art in India to recognise this fact.

Literary.

MODERN TENDENCIES IN JOURNALISM.

At a recent social gathering of the Institute of Journalists, Sir Edward Russel, Past President of the Institute, made a very interesting and thoughtful speech on the above subject. The following excerpts therefrom will repay perusal:—

UNIVERSITY MEN AS JOURNALISTS.

The incursion of University men into the profession was a distinctly new feature which might result in considerable changes. He had noticed that many of the journalistic appointments that used to be filled by men who had worked themselves up in the profession were now being taken by men from the Universities. It was a good thing for University men or any other cultured men to enter journalism—"if they became good journalists" he added. "It is no use a University man getting to be Lord Chief Justice of England unless he is a good Lord Chief Justice; his being a fine academic man won't secure the administration of justice and credit for English jurisprudence." Another reason why they regarded this subject with interest and even pleasure was that the Universities in this country were going to be something very different from what they had been. "I am a Liverpool man and you are Yorkshire people—(laughter)—and I know that at the present time this is rather a sore question. But I leave aside all matters of controversy, and I will say as a sort of gentle prophecy that I think the course of events is going to be in favour of the establishment in this country of Universities of a new kind in every very great centre of population, and for myself I do think that will be a change for the better. We cannot expect to carry Oxford and Cambridge all over the country, and I for one shall regard it as an advance among us if we can get rid of the old class feeling that is attached to Oxford and Cambridge. I should like Universities to be—as they have long been in Scotland—institutions in which all classes meet. I should like there to be no class in this country which could not get access to a University, and I believe that many a journalist as this University system grows up, will find that the path of his family life has been smoothed for him by the existence of Universities at which a good education can be obtained for his children."

DULL BREVITY.

Sir Edward had a word to say about the journalistic "snipster." They must all admit, he remarked, that there was some danger of everything editorial, including the writing of comments and paragraphs, going down a little in the scale from the position which it had held for

many years. He recalled the names of Rintoul and Hutton of the *Spectator*, Perry of the *Morning Chronicle*, Delane of the *Times*, and Sir Wemyss Reid, and asked his hearers to compare such men—and some in that room who were still conducting the business of journalism in the fine old spirit of these men—with what he might call the "snipsters," who turn out little bits of dulness and nonsense under the notion that because it is short it is witty. "I am afraid a great many of these gentlemen are not good even at snippets, but there is a commercial idea that snippets are things to pay, and the amount of dulness people go through because it is short is truly astonishing. I am not against brevity, but I am against dull brevity, and I shall be glad if the public taste changes." "I don't believe," he continued, "that journalism will eventually deteriorate. On the other hand, under the new journalism, along with greater popular interest there is a greater feeling of impartiality, a more national feeling, less taking a side and sticking to it, and the newspapers are less sectional. These are all changes for the better, and are likely to meet with welcome and to be of great advantage."

Turning to the future, Sir Edward described some of the visions discerned by people who approached the social problem from various standpoints, and concluded. "Whatever occurs we shall chronicle it; we shall contribute to it; we shall be there."

Mr. H. J. Palmer, the president of the Institute, at a later stage, in proposing a vote of thanks to Sir Edward said that Sir Edward had played many parts, and had played them all well, but there was no service that he had rendered with more advantage than that of combining the great function of proprietor with that of practical every-day editing. That was the more important because he was afraid there was a tendency to the disappearance of the proprietor-editor. The proprietor-editors had taken a large share for threequarters of a century in raising journalism to the height at which it stood to-day. They had the immense advantage of knowing from the inside what journalism ought to be, and they had the public spirit now and then to sacrifice—though only temporarily—immediate advantages for the purpose of keeping up the high standard of journalism. There was a tendency on the capitalist side of a newspaper to look at the capitalist side and very little else. That, he was afraid, was a necessary tendency of a time in which newspapers passed into the hands of limited liability companies, and in which it became more and more the responsibility of active professional journalists themselves to keep up the standard that had been bequeathed to them by their predecessors. One function of the Institute of Journalists, Mr. Palmer pointed out, was that of sustaining individual journalists at high following ideals.

Legal.**LEGAL AID SOCIETY.**

President Roosevelt gives the following account of the Legal Aid Society founded in New York by Arthur Von Brissin :—

"A peculiar and exceedingly desirable form of work, originally purely charitable, although not now exclusively so, is that of the *Legal-aid-Society* founded by Arthur Von Brissin, in New York. It was founded to remedy the colossal injustice which was so often encountered by the poorest and most ignorant immigrants; it has been extended to shield every class,—native and foreign. There are always among the poor and needy, thousands of helpless individuals who are preyed upon by sharpers of different degrees. If very poor, they may have no means of obtaining redress; and especially if they are foreigners ignorant of the language, they may also be absolutely ignorant as to what steps should be taken in order to right the wrong done to them. The injuries that are done may seem trivial; but they are not trivial to the sufferers, and the aggregate amount of misery caused is enormous. The *Legal-aid-Society* has made it its business to take up these cases and secure justice. Every conceivable variety of case is attended to. The woman who has been deserted or maltreated by her husband; the poor sewing maid who has been mulcted out of her wages; the ignorant immigrant who has fallen a victim to some sharper, the man of no knowledge of our language or laws, who has been arrested for doing something which he supposed was entirely proper; all these and countless others like them apply for relief and have it granted in tens of thousands of cases every year. It should be remembered that the good done is not merely to the sufferers themselves, it is also a good done to society, for it leaves in the mind of the new comer to our shores not the rankling memory of wrong and injustice, but the feeling that, after all, here in the New World, where he has come to seek his fortune, there are disinterested men who endeavour to see that the right prevails.

PUNISHMENT OF OFFENDERS.

The International Congress of Comparative Law which met in Paris in 1900 appointed, on the motion of Mr. Crackanthorpe, K. C., a Commission charged with the duty of investigating the principles which should guide the judiciary when pronouncing a criminal sentence. The commission held its first sitting in Paris last May. It decided as a preliminary step to put itself into communication with the judiciary with the bar, and with

other persons known to be interested in the struggle of society against crime, with a view of ascertaining the extent (if any) to which sentences are, or should be, influenced by general conceptions of the object of punishment, or by matters bearing either on the offence itself or on the character of the individual committing it.

The commission has sent out the following questions and has requested brief answers for them :—

Question 1.—Does the judge, in fact, when awarding a sentence act on any theory as to the object of punishment such as retribution, expiation, example to others, reformation of the offender, or the like? Is it desirable that he should do so?

Question 2.—Does the judge, in fact, keep the same end in view in the case of all offences, or does he make a distinction between one offence and another? Is it desirable that he should do so?

Question 3.—When he makes a distinction between one offence and another, on what is the distinction based? On the character of the punishable act looked at from a moral standpoint? On the greater or less frequency of the crime in the district? On the greater or less risk to which it exposes the community, or on any, and what, other circumstances?

Question 4.—When he makes a distinction between one individual and another does the distinction turn on the offender's antecedents as shown by his judicial record, or on his degree of intelligence and education, or on any other, and what, circumstance? Is the age or sex of the offender taken into account, and if so, to what extent? Is it desirable that any, and which, of the distinctions mentioned above should be made?

Question 5. In the absence of special circumstances does the judge award the full penalty allowed by the law, or does his normal sentence fall short of this?

When the answers to the above questions have been received, the commission will endeavour to extract from them the guiding principles of punishment which prevail at the present time, as well as those which, in the opinion of the authorities consulted, ought to prevail. The materials thus collected cannot fail to prove useful to judges and legislators in all parts of the globe, since like rays of light diffused from a central focus, the experience of each country will be made known to the rest.

The recommendations of the Commission will be submitted to the next International Congress of Comparative Law, and it is hoped that in the result, a set of practical rules may be framed, worthy of being accepted and acted on by all who take part in the administration of criminal justice.

Trade & Industry.

LEATHER-WORK.

This is the latest addition to Messrs. Dawbarn and Ward's 'Useful Arts and Handicrafts series.' The author is Mr. Hallton East. The booklet contains simple instructions for blind and color tooling, gold blocking; leather mosaic, applique, and patchwork; pressed, modelled, and moulded leather; leather-covered relief, cuir bouilli; carton cuir and cut-leather or scroll-work.

He deals also with methods of coloring, staining, sizing, and varnishing. The booklet has many diagrams of tools, etc., and eight full pages of designs.

ITALY'S INDUSTRIAL ADVANCE.

A writer in the *Edinburgh Scotsman* declares, after personal investigation, that the industries of Italy show a remarkable advance. This is largely owing to the development of electricity as a motive power. In the valley of the Nerina, where are the Marmore falls, formed by the plunge which the River Velino takes over a precipice 600 feet high into the River Nera below, manufactories of all kinds are springing up, while down the united streams as far as Terni there are nothing but huge factories at work or in process of construction. What has occurred at Terni and in the Valnerina has taken place on a smaller scale wherever good water power for the development of electricity exists. It is proposed to light Rome from the Marmore falls, from which it is distant seventy miles. The production of cotton goods has risen in some five years from 50,000,000 francs (2,000,000*l.*) to 100,000,000 francs (4,000,000*l.*) while the exportation of silk has increased from 250,000 pounds weight to nearly 2,000,000. In spite of emigration the population of Italy increases by about half a million a year; education is spreading, for it is now free and compulsory, and altogether the conditions of life in Italy are steadily ameliorating.

NATIONAL INDUSTRIAL EXHIBITION AT OSAKA IN 1903.

The national Industrial Exhibition which the Imperial Government of Japan will hold at Osaka, in 1903 will present some novel and interesting features never witnessed on similar occasions in the past, to one of which in particular the Japanese Government wishes to call the attention of foreign manufacturers and of the industrial public in general. That is, the establishment of a special building for the samples of such articles produced or manufactured in foreign countries as may be of value for purposes of comparison or

reference in the way of industrial improvement. The primary object aimed at is thereby to afford the Japanese manufacturers an opportunity of studying the latest products of Western invention with a view to the improvement of Japanese industries. But at the same time it will be observed that the establishment of the building in question offers to foreign manufacturers a rare opportunity for exploiting the rapidly developing markets of the whole Far East, for the coming exhibition is sure to attract, besides millions of Japanese, large crowds of visitors from the continental countries of Asia.

THE DESTRUCTION OF FUNGOID GROWTHS

The United States Consul-General at Coburg reports that a simple and effective agent for the destruction of fungoid growths is manufactured by a firm at Cassel, and has been put on the market under the name of "mikrosol." Professor Migula, of the same city, has made a thorough examination into the action and effect of mikrosol, and recommends it as very efficient, both for the destruction and prevention of fungoid growths. Mikrosol is easily soluble in water. A 2 per cent. solution applied to wood by means of a brush will bring about the desired effect almost immediately. Mikrosol ought to be very useful on ship-board, especially in tropical and semi-tropical countries.

JAPANESE COMMERCIAL AGENTS ABROAD.

According to the report of the Yokohama Chamber of Commerce for December last, the Japanese Government has decided to appoint Commercial and Industrial Agents in London, New York, Tientsin and Shanghai. The Agents in London and New York will be charged with the investigations of financial and economic affairs, while the agents in Tientsin and Shanghai are to look after commercial and industrial affairs. In addition to these, one engineering expert will be stationed at either Boston, Philadelphia or New York in order to look after engineering affairs.

COFFEE CIGARETTES.

Coffee cigarettes are the newest sort of smoke. They are supposed to cure the modern man of the so-called nefarious habit. The cigarette is made of the leaf of the tree, not a compound of the ground bean. Coffee-leaf smoking, while absolutely harmless, is said to possess the property of imparting to smokers an intense dislike for the flavour of tobacco. We should think ourselves, that it would produce, also, an intense dislike for all the other vanities of this world.

Medical.**THE SPITTING OF BLOOD.**

This is always an alarming symptom to the patient. Often the condition after careful examination may fail to elicit any lesion which would account for the hæmorrhage, even though it be slight. In five cases in which the patient had had repeated attacks of slight hæmorrhage, after careful examination it was found that it was entirely due to a varicose condition of the veins at the base of the tongue, in which there was saccular dilatation followed with rupture. The hæmorrhage is very much the same as pulmonary, the blood being rather bright in character and only slightly mixed with mucus. In three cases the hæmorrhage was severe and alarming. The dilatation is usually due to interference with venous return, causing stasis, and is often associated with lesions of the intestines, lung, liver, or kidney.—*Health*.

HOW TO USE MILK.

Milk is a fluid which readily coagulates in the stomach and forms a curd. Now the curd of the milk of different animals differs much in its constituency, hardness, and digestibility. Cow's milk forms a very hard, indigestible curd compared to that obtained from the milk of the ass, for example. All milk coagulates when acted on by the gastric juices, so that Nature is careful to provide this fluid in such a form that it can only be swallowed in dribbles, and after complete mixture with the saliva. While water is provided in running streams and ponds and lakes and seas, so that men and animals alike can drink themselves full in deep draughts, milk is provided in reservoirs, called udders, from which it can only be obtained in tiny streams by much pulling at a teat. This gives the key to the whole position. In order to use milk properly, and in such a way that it can be readily digested and assimilated, it is necessary, firstly, to dilute it, and, secondly, to imbibe it in dribbles. The practical method of carrying out these principles is to take half a pint of new milk, freshly drawn from a healthy cow, add to it half a pint of distilled or boiled water, or a little less of rice water or wheatenade, or oatenade, and then to sip it or, in case of invalids, to suck it, like cocktail, through a straw or glass tube. There are many people who are gradually dying of starvation because they can digest nothing, who would be restored to a considerably increased standard of vitality if they would only learn the proper method of using milk.

"PICKWICK" FOR TOOTHACHE.

"Obiter Dicta" is an excellent cure for a cold in the head; although Hansard's "Parliamentary Debates", from 1870 to 1901, read in bed, is even more effective. Small-pox is an awkward disease to treat successfully by means of therapeutic literature, but Mr. Brown thinks that it is quite certain that if a patient succeeds in reading through Barning Gould's "Lives of the Saints", he will be out of danger before he reaches December 31st in the calendar. For toothache there is only one effective cure. This is a dose of "Pickwick," taken as follows:—Procure a small-type edition of the "Pickwick Papers," a large tumbler of hot and strong whisky and water, a comfortable armchair, and carefully assimilate these ingredients before a bright fire. The patient will probably be quite oblivious of his toothache before Mr. Pickwick gets as far as Rochester.

DARING FEAT OF SURGERY.

Dr. Dawbarn, one of the surgeons of the New York City Hospital, has been awarded a prize of 200 guineas by the Philadelphia Academy of Surgery for the most notable medical achievement of the year. Dr. Dawbarn has discovered a new method of treating cancerous growths in the head where they cannot be cut out. The operation consists of cutting out the external carotid arteries on both sides of the neck, thus depriving all the head except the brain and the eyes, of the main supply of blood. Cutting off the blood not only stops the cancerous growths, but by continued deprivation, of nutrition ensures a gradual but steady lessening of the growth. Several patients have been cured by this daring operation, which has also been successfully employed in curing cancerous growths in the pharynx.

PIPE AND GLASS.

For those fond of this conjunction the *Lancet* has a word of warning. When evil effects ensue upon smoking tobacco they are, we are told, very much intensified by indulgence in alcohol. The powerfully solvent action of alcohol is sufficient explanation of this: "The chief poisonous constituent of tobacco smoke is pyridine and not nicotine. Pyridine is a poisonous base not so easily soluble in water as in alcohol. Pyridine bases can be easily traced in the mouth of an immoderate smoker, and especially the smoker of cigars. An alcoholic drink is therefore calculated quickly to wash out this poisonous oil and to carry it into the stomach, absorption of the poison ensuing, giving rise to definite toxic symptoms, due not so much to alcohol or pyridine bases alone as to the combined action of both in the manner indicated,

Science.

PROFESSOR CROOKES AT THE ROYAL SOCIETY.

At a recent meeting of the Royal Society Sir William Crookes read a paper on "Radical Activity and the Electron Theory."

Electrons, Professor Crookes described as atoms of electricity—Lord Kelvin's satellites—disembodied discharges of electricity, which were possibly the basis of matter itself. Some rare metals, he said, had been recently discovered, such as radium, which possessed the property of emitting electrons at ordinary temperatures, and capable of producing light which would pass through opaque bodies. As instancing the tremendous energy of the electron, Professor Crookes said that the power latent in a gramme of electrons would be sufficient to lift the British Navy to the top of Ben Nevis. The lecturer here exhibited two very beautiful experiments with a diamond and a ruby, which he caused to glow with extraordinary radiance inside a vacuum tube, while they were being "bombarded with electrons." The electrons threw a shadow if allowed to fall upon an opaque substance, and if the shadow were prolonged, a curious permanent effect would be produced upon glass which would remain if the glass were melted and re-blown. Electrons, falling from a piece of metal, carried away particles of the metal as well, and gold was easily volatilised in this manner, while platinum, if allowed to arrest the abnormal velocity of the electrons, would be raised to an extremely high degree of temperature. In concluding, Professor Crookes said, "*I think we have almost reached the stage where matter and force seem to merge into one another.*"

MULTIPLEX TELEGRAPH.

It is stated that the Rowland multiplex telegraph system, the invention of a Baltimore man, has been adopted by the Italian Government. The system permits the transmission of eight messages over the same wire at the same time.

STATE AGRICULTURAL LABORATORY.

Mr. W. Carruthers of the British Museum, and Sir W. T. Dyer of Kew have been corresponding in "*Nature*," on the need for a State Agricultural Laboratory where the diseases of plants can be investigated, and remedies found by experiment and other means. The question arose in a statement made by Mr. Carruthers at the Royal Microscopical Society, of which he is President, as to this national want. Sir William Dyer considers that Kew already fulfils this want by naming fungi which are sent to them, but Mr. Carruthers refers to a recent case of cherry disease in which the steps which prevented the

spread of the evil, were taken by the Royal Agricultural Society and by private individuals, and not by Kew or the Board of Agriculture. This is a want which all persons engaged in Agricultural, Horticultural, or Planting pursuits must necessarily feel at times,—the need of a reliable source of information on all plant diseases. Efforts are more often made by private individuals, in this direction, than by anyone else, and the establishment of such a Laboratory as suggested by Mr. Carruthers would be a real boon.

A CLOCK THAT NEEDS NO WINDING.

A practical watchmaker is the inventor of a clock which has, it is said, never been wound up, as it has no main-spring, and its works consist of but three wheels. The clock, which is in the form of a pendulum weighing 40 pounds, is supported from the top by a very thin piece of steel about 2 in. long and half an inch wide.

The pendulum rods are made of different kinds of metal, to compensate for contraction and expansion and the whole thing is adjusted to beat actual seconds.

All that was required (so we are informed) to set the clock going was to start it swinging, "when the force of gravity, indefinitely maintained by magnets, did the rest":—*Science Signings*.

MAN OF THE FUTURE.

Professor Brunor makes a startling prediction as to human development. He sees in the future man a being in whom strange transformations shall have taken place; a being in whom brain is master, ruling a body much larger than that of the present man; a body which has lost its floating ribs, its vermiform appendix, and its little toes, and in which many other changes have taken place. He believes the chest and upper and lower limbs will be larger, and that the future man will be much taller than his prototype of to-day.

WHO ORIGINATED ANÆSTHESIA.

It is stated that anæsthetics for surgical purposes were used in China 1,700 years ago. It would be appear that when a surgeon conducted a serious operation he gave a decoction to the patient who, after a few moments, became as insensible as if he were dead. Then, as the case required, the surgeon performed the operation, incision or amputation, and removed the cause of the malady; then he brought together and secured the tissues, and applied liniments. "After a certain number of days, the patient recovered, without having experienced the slightest pain during the operation."

General.

THE DECEASED WIFE'S SISTER BILL.

'Tis surely easy one's sense to carry,
 'Midst all this pother
 That it would be very wrong to marry
 One's own grandmother.
 Now, all the prohibited degrees are
 But affinity;
 Since the Church's most drastic decrees are,
 Consanguinity.
 Accept these : where stands the dead wife's sister ?
 Surely no nearer
 In blood to the widowed—who has missed her
 Who made life dearer.
 Should he then wish to change his sore estate,
 Because he missed her ;
 Why, in God's name, should he not find a mate
 In his wife's sister ? *To-Day.*

THE INBORN VICE OF SOCIALISM.

Socialistic communities (says *Science Siftings*) have been founded many a time; their history bears a striking family likeness. The end came to most Utopias because communal life made the people lazy. One of the most recent experiments in this line was a town named Ruskin. It lacked almost every convenience of modern life. The people dressed indifferently to the point of slatternliness and the children ran almost as wild as the untended pigs. The late W. H. Channing, in carefully-selected words, gave this tendency towards indolence as the reason for the failure of Brook Farm, and he was a member of the community, too. Mr Noyes, founder of the Oneida community—a Socialist settlement—after a personal investigation into the causes of failure of these experiments; Mr. Macdonald, a Scotch Owenite, who visited most of the American communities on a tour of investigation and research; and Mr. Nordhoff, who investigated some seventy odd communities, all agree in saying that laziness is the *bête noir* of applied Socialism. One who has been through it summed up Ruskin and all the rest, when he said: "The industrious, the skilful, and the strong saw the products of their labour enjoyed by the unskilled and the improvident, and self-love rose against benevolence."

INDIA AND THE CORONATION.

The following is a complete list of the Indian representatives proceeding to England to attend the Coronation:—

Calcutta City—Maharaj-kumar Prodyat Kumar Tagore.

Bengal Presidency—The Hon'ble Saiyed Wasef Ali Mirza, of Murshidabad.

Bombay City—Sir Jamsetjee Jejeebhoy.

Bombay Presidency—Meherban Manpabrao Madhavrao Vinchurkar.

Madras City—Rajah Sir Savalay Ramaswamy Moodelliar.

Madras Presidency—The Rajah of Bobbili.

The United Provinces—Nawab Faiyaz Ali Khan.

The Punjab—Nawab Fatch Ali khan Kizibash.

Burma—Maung On Gaing.

The Central Provinces—Mr. Chitnavis.

Assam—Rai Jagannath Barua, Bahadur.

Oudh—Rajah Pertab Singh of Pertabgarh.

The Frontier Province—Lieutenant Colonel Nawab Mahomed Aslam Khan, Kanwar Sir Harnam Singh, and Sir Baha Khem Singh Bedi of Kullar.

STATURE AND LONGEVITY.

A writer in *Science Siftings* calls attention to the fact that nations of small stature are short-lived. We give a classification of his below :

GROUP "A."	GROUP "B."	GROUP "C."
Smallest sized men and women and short lived	Moderate sized men and women and longer lived.	Largest sized men and women and longest lived.
Eskimo.	Chinese.	Chinese.
Mongol.	(South race).	(Tartar race).
Burmese.	Georgians.	Scandinavians.
Siamese.	Arabs.	English.
Japanese.	Turks.	Russians.
Jukaghrites.	Syrians.	Finns.
Koriakites.	Egyptians.	Bulgarians.
Bengalese.	Italians.	Irish.
Javanese.	Spaniards.	Scotch.
Malays.	French.	Germans.
Hottentots.		

THE LATE LORD KIMBERLEY.

The death of the Earl of Kimberley, remarks the *Voice of India*, removes from the ranks of British statesmen perhaps the last surviving representative of the good old Whig type. Modest and self-contained, Lord Kimberley still inspired confidence in friends and commanded the respect of his opponents. His control of Foreign Affairs never betrayed the weakness of the Little Englander nor the vaulting ambition of the Imperialist. He wished England to be at peace with the world, and took long to be persuaded to meddle with the affairs of other nations even when interference was called for. But it was as Secretary of State for India that we found Lord Kimberley at his best. Justice was his guiding principle in dealing with the questions that went up to him. He studied the questions conscientiously, and seldom forgot, in issuing final orders, that India was a poor and dependent country. India owes more to him and to the late Lord Iddesleigh (Sir Stafford Northcote) than she seems to be aware of. Personally, the late Earl was a gentleman in every sense of the word. He bore up against bereavements with characteristic fortitude and resignation.

SOCIAL REFORM.

The following two extracts are taken from Dewan Bahadur S. Srinivasaragava Ayengar's Convocation address :—

On the subject of social reform, by which I understand the abolition or modification of practices, usages and restrictions, that are found to be harmful to the healthy progress of the community, you must remember that you have to take the society along with you, if you do not wish to secede from it altogether. How far you can proceed in the matter in a given case must depend upon the strength of the prejudice to be overcome in the particular community to which you belong. Before taking a particular course of action in this direction, weigh well the consequences both to yourselves and those nearest and dearest to you, and if after having done so, you feel bound to take the course as a right-minded man by all means take it. But do not complain if others cannot take the same view as you do. The society in which you live is a complex organism and you cannot alter a part of it without throwing other parts out of gear; and if the necessary adjustments can easily be made, there is a probability of the reform being accepted but not otherwise. To decide when the time has arrived to introduce a reform requires wisdom and insight. Ardent natures are apt to push forward with undue haste while cool and calculating persons are apt to lag behind.

If I am asked to say which of the two I would prefer, I must say I prefer the former, for the reason that persons who show their sincerity and devotion to the cause they have at heart by undergoing sacrifices and subjecting themselves to inconvenience, are few, while compliance with present conditions and usages which brings with it no social inconvenience is the rule.

DUTIES TO THE MASSES.

A charge is sometimes brought against the higher classes in this country that they neglect the welfare of the classes below and treat them with indifference. It is your duty to wipe off this reproach and to make it a special business to do what lies in your power to ameliorate the condition of the lower classes. You should remember that happiness is only to be reached through active beneficence, through the application of the knowledge you have obtained to the promotion of the well-being of your fellowmen; and the more helpless they are the more are their claims to your sympathy and support. It rests with you to dedicate your life to worthy ends, or let it lie stagnant and run to waste. But if you choose the better part you will find in the life lived your reward.

MARTIAL LAW IN CAPE COLONY.

An important debate took place recently in the House of Lords regarding the recent enforcement of martial law by military officers in Cape Colony and Natal. Lord Spencer and Lord Coleridge entered a strong protest against it. Lord Coleridge pointed out that martial law might be imposed by legislative enactment, but the ordinary constitution of the Cape was at present suspended and martial law was being applied by the mere fiat of the Executive. It was prohibited by Magna Charta and by the Petition of Right, and every year when the Army Act was passed martial law upon civilians was prohibited in time of peace. Under it persons might be apprehended without warrant, might be arrested without any charge being brought against them, and might ask in vain for the protection of the laws of evidence; they might have their homes searched, property confiscated, and lives taken. Martial law indeed, was the embodiment of pure force, it was the imposition of the bare will or whim of the military. When applied in times of public excitement by men of one party to men of another, when, applied by men of one race to men of another race, by men of no judicial experience, then the danger to life and liberty was increased from something like a risk to something like a certainty.

Lord Salisbury defended the action of the authorities in Cape Colony and in the course of his observations said that martial law has no place in the constitution whatever, that it is merely a fashion of speech, that there is no such thing as martial law, but there is a substitute for it—the application of force when law will not suffice.

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Mr. Henry J. S. Cotton.

It must be a source of singular satisfaction and pride to us in Southern India that the great Indian proconsul who left India last week amidst the unanimous regret of the whole country was born at Kumbakonum in 1845. Since the retirement of Lord Ripon we do not believe any other Anglo-Indian ruler has roused such deep feelings of affection and regard in the minds of the Indian people as the late Chief Commissioner of Assam. Mr. Cotton belongs to a family who for five generations have made India their home and the task of governing India well their life-work. Mr. Cotton himself declares in the pages of his excellent book on *New India*.—"It is my pride that I am, as it were, an hereditary member of the administration." In his early days Mr. Cotton was attracted to the philosophy of August Comte. It is not therefore surprising that throughout his whole Indian career Mr. Cotton has been actuated by the true principles of the "Religion of Humanity." He has ever been the sincere friend and well-wisher of the Indian people and has had the rare courage to advocate publicly their legitimate claims and aspirations. A fearless champion of the weak against the strong and a bold repressor of oppression and injustice in any form or shape, Mr. Cotton exposed the faults of the Assam planters in their treatment of coolies in tea-gardens. For this he has been the victim of slander and calumny at the hands of organised capitalists and their supporters in the Anglo-Indian press. It is only a strong and stern sense of justice and the conviction of having done what was right that enabled Mr. Cotton to pursue his righteous course without having in the least been affected by the vile and vituperative criticism heaped on him.

It is a sad commentary on the singularly good service which Mr. Cotton has rendered to the planters of Assam that at the close of his career he should be regarded as their enemy. In reply to a

farewell address presented at Shillong, Mr. Cotton repudiated the idea that he was the enemy of the planters. Said Mr. Cotton :—

I regret the annoyance which was caused by the publication of this exposure ; but that annoyance, even if it results in my being persistently described as a "malignant slanderer," may be regarded as a trifle, light as air, if it has been followed by the removal of the abuses referred to.

It is a great pity that a feeling of suspicion should be spread abroad that Mr. Cotton's great and honorable career in India has been brought to a close by the action of higher authorities whose favour Mr. Cotton has not made it a study to obtain. His Highness the Maha Rajah of Dharmabanga was but voicing the unanimous voice of the people the other day when he said in public meeting :—"For twenty-nine years he has devoted himself to us and has won our affection and confidence to an extent which does not fall to the lot of many officials in India. . . . Mr. Cotton knows us, and we know him, and there is a bond between us which neither time nor space can loosen or sever."

In an admirably eloquent speech full of pathos and good—will Mr. Cotton responded :—

I am knit to this country by an hereditary link extending over five generations, by a personal service of 35 years, and by affectionate sentiments to the people, which are reciprocated by them. I have held high office among you, and as I have earned your confidence, esteem and regard, I deem this my reward. In my retirement I can never forget India ; and I shall never forget Assam. All the energies of which I am still possessed will continue to be devoted to the service of this great country. I shall always owe to India more than I can repay. I can never discharge all my obligations to her people. I have never ignored and shall never be unmindful of the responsibilities I owe to the Government. I have never failed in my sense of discipline. I am true to my salt. But in my retirement or in harness the interests of India will always be nearest to my heart. I bid you again farewell. I am deeply grateful for all the kindness you have shown to me ; and I part from you with sincere sorrow."

May Mr. Cotton live long and the glorious traditions of his administration actuate his countrymen in India !

India in England.

After reading the proceedings of the great public meeting held in the Memorial Hall in London on the 15th. ultimo to advocate the objects of the Indian Famine Union, one is inclined to regard Lord George Hamilton's refusal to receive a deputation of that body as a blessing instead of a curse. For it is a sad fact that with all his boasted imperialism, the average Englishman does not trouble himself much about the affairs of the Indian Empire which Providence has committed to his charge. The heart of the English nation is good, and experience has shown that in spite of occasional lapses the Britisher's sense of justice can safely be relied upon. It is this fond hope that prompts us to take an optimistic view of the meeting in the Memorial Hall. Mr. Leonard Courtney in a short but pointed speech urged that the authorities ought not to rest satisfied with the mere prevention of famine.

Something must be done to extinguish the starvation and pauperism that make that poor law administration necessary. We are not content to relieve the impoverished people, we want to do something by which pauperism may be diminished and abolished. We feel that it is not enough to have machinery to cope with famine when it comes. There is vast scope for work in preparing for famine and enabling it to be withstood, not merely by Government help, but by making the people themselves better able to cope with the calamity."

The case for an inquiry into the causes of constant famines could not have been put better. Lord Ripon also urged the case for inquiry with great force. His Lordship rightly observed: "It is impossible that a great agricultural country like India should be visited with famine of the severity of that which has fallen on India of late without there being created thereby a state of affairs requiring to be looked at from a new point of view, and also requiring to be dealt with by a different system from the present." Lord Hobhouse, Mr. S. S. Thornburn, Mr. Vaughan Nash, Sir Raymond West, Sir W. Wedderburn, Sir M. M. Bhowndagree, Sir John Jardine, Lady Hope, Mr. Alex. Rogers, Mr. Martin Wood and several others supported the view taken by Mr. Courtney and Lord Ripon, and a number of important resolutions were passed. It was also decided to present a petition to the House of Commons conveying the request of the meeting. We sincerely hope that an inquiry as prayed for by the meeting will be granted, and that the British public will be made acquainted with the gravity of the situation in India. Elsewhere in our General Notes will be found the resolutions passed at this meeting.

Lord Curzon and the Telegraph Mutiny Memorial.

In a speech replete with his usual lofty and stirring eloquence, Lord Curzon opened the other day at Delhi the belated memorial to the Telegraph Signallers who bravely stood to their guns at the post of duty on the fateful day of 11th May 1857. Said His Excellency:

Whatever in life or in history lifts humanity above the ordinary level and makes us forget the petty and the squalid, of which there is unfortunately so much in our midst; whatever shows human character in its higher aspect, namely, as resourceful, unselfish and daring that is worthy of being held up to praise for the sake of posterity, and its public commemoration cannot fail to leave its mark upon the minds of future generations.

We heartily echo the noble sentiments given expression to in the above passage. All the same we cannot help confessing to a feeling of sadness that in one way and another, that dark episode of human frailty and crime, the Indian Mutiny, should be continually brought up, and its minutest incidents and horrors impressed on the mind of a generation which happily has no personal memories of a time prior to that of the established *Pax Britannica*. We cannot see that any useful purpose is served by raking up the memory of the scenes of barbarities and horrors. This view of the case was combated by His Excellency in the following words:—

Tragedies and horrors and disasters do occur in the history of men, and it is useless to pretend that they do not. In the history of India they have not been wanting, and as in the case of the Mutiny, there have been instances where the racial element was introduced, and where there were deeds of blackness and shame but that is no reason for ignoring them. Pass over them the sponge of forgiveness, blot them out with the finger of mercy and of reconciliation, but do not pretend that they did not take place, and do not, for the sake of a false and mawkish sentiment, forfeit your chance of honouring that which is worthy of honour.

Wise words these, to which hardly any exception can be taken, but we doubt very much if the ordinary bulk of humanity can view these things from the same philosophic and lofty standpoint as His Excellency. In the present peculiar state of our country, where already there is not much of cordial feeling to boast of between the rulers and the ruled, and where races of such immense diversities are living as one political unit, the welding of the various peoples into one harmonious whole—the goal of true Indian patriotism and the highest Indian statesmanship—can scarcely be reached by the perpetual opening of old sores.

The Vagaries of Examiners.

A good deal of useful evidence was tendered before the Indian University Commission which sat at Lahore. Mr. Robson, Principal of the Government College at Lahore, drew the attention of the Commission to the ridiculous manner in which questions are set by examiners, especially in the subject of English literature. We have heard similar complaints expressed in this part of the country in regard to the same subject.

Mr. Robson quoted the following questions from an examination paper of three hours :—

"Give the biographies of Chaucer, Bacon, Locke and Addison—3 marks. Name their principal writings and give a summary of the purpose and contents of each—5 marks. Trace their influence on English thought and literature—6 marks. Describe the change from the lyrical to the romantic in English poetry—3 marks. Describe the improvements introduced by Hume, Roberts and Gibbon in the method of writing history—1 mark each. Describe the growth of the English novel from the commencement up to the present time—5 marks. Write a history of the Arthurian legends—4 marks. Compare in detail Spenser with Tennyson—5 marks. Quote from the *Fuery Queen* and from *The Passing of Arthur* to illustrate your answer—4 marks. State the evidences of the chronological order of Shakespeare's plays—3 marks.

In answer to a question by a member of the Commission, Mr. Robson replied :—

Each question would need a volume to itself. The only kind of person who could pass in such an examination is the boy who knows nothing about English literature but has crammed a text book and memorised a mass of general remarks which he is able to repeat without really understanding them.

The evils referred to by Mr. Robson are very serious. Under the present system boys are compelled to answer questions concerning authors whose books they have never read. Truly, the ordinary boy knows nothing about English literature at first hand; he has merely crammed the history of English literature. Commenting on Mr. Robson's evidence and the specimen of questions cited by him, the *Indian Nation* makes the following observations which can by no means be considered strong :—

"We do not want to suggest punishments of a departmental kind, which might very well be left to the consideration of the authorities, but, having regard to the generally ill-constructed character of examination papers in India, we think it would be desirable to lay down a rule that every man who sets a paper should, after the examination has been held, write out the answers to his own questions in a form which might serve as a model and send them on to the University which should then publish those answers. In that way alone can an examiner be brought to look at his own questions from the examinee's point of view.

The Out-Look of the Hindu Race.

Mr. N. N. Ghose, editor of the *Indian Nation*, in his book on "The Memoirs of Maharaja Nubkissen Bahadur" which is reviewed elsewhere takes a very gloomy and despondent view of the future of the Hindu race.

"The prospect of the Hindu race", says Mr. Ghose, "is uncertain, even gloomy. It will not recruit from other religions, but can lose members to them. It will be extinct by the disintegration of its society. Union by marriage with any other race will also tend to extinguish it. In stead of acquiring a greater coherence every day and tending to national unity, it is splitting up into more and more classes and sects. On the absence of a Hindu regime there are no agencies possessed either of moral or civic power for effecting the needful reforms, readjusting society, evoking order out of chaos and breathing new life into the Hindu people. Regeneration appears to be impossible, dissolution pretty certain. What then is the hope of the Hindu? Scarcely anything but this, that the creed which dies with the Hindu may live on in the European. If the Hindus, before they pass away can communicate to some at least of the sons of the west all that is best in their religion, their philosophy and their ideals of life, they may die content. The principles, the ideas, the habits will remain; the new possessors will probably cherish them with more earnestness, defend them with greater zeal and energy, develop and propagate them in a more effective way. The hope of the devout Hindu is in the European. He may well fear that he will leave no other heir in the spiritual sphere." It seems to us that Mr. Ghose is needlessly despondent. The Hindu may change in externals but the spirit of his religion and society is not likely to vanish for ever. The spirit of the Vedanta will live unto eternity, for it embodies the eternal principles of truth and justice.

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*SOME FAMOUS ANGLO-INDIAN NATURALISTS
OF THE NINETEENTH CENTURY.*

BEFORE Government undertook the regular investigation of its natural history and geology, India was in the main dependent upon the efforts of amateurs for advancing our knowledge of these subjects. And it is a fortunate circumstance that throughout the century which has just come to a close such amateur labourers have never been wanting in this great field of research. With all the members of this noble band their labour was a labour of love; and the same may indeed be said for their professional brethren by whom so much of the work has been carried on of late years, for it is probable, if not certain, that no one enters upon the study of natural history who has not an innate bias in that direction. In one respect the appearance on the scene of the professional element has been to some extent disadvantageous since it has tended to check amateur work; but even at the present day the number of amateur naturalists in India is very considerable, as is evident by the flourishing condition of such institutions as the Bombay Natural History Society; and there is little doubt that much good work will be done in the future by such unpaid labourers.

In a country like India, where large game of many kinds is still numerous, such an intimate connection exists between natural history and sport that it is in many instances a matter of difficulty to decide whether or no a particular name should be included in the roll of naturalists. And to the following list of names of eminent deceased as contributors to our knowledge of the natural history of India there are doubtless many others which might have been added. The object and the aim of the present article is indeed merely to call attention to the names and achievements of some of the most eminent of the Anglo-Indian Zoologists who have worked and passed away during the

century which has been one of such remarkable progress in physical science of all kinds, and if there are any important omissions they are accidental.

From the fact of his birth having been coincident with that of the century just closed, coupled with the extreme importance and value of his labours, there can be no question as to the propriety of commencing our brief and sketchy survey with the honoured name of Brian Houghton Hodgson. Born in 1800 and surviving till 1894, Hodgson, in addition to being a learned archæologist and linguist, may lay claim to being one of the most distinguished of the Anglo-Indian naturalists whose labours were completed within the limits of the nineteenth century. The amount of work he accomplished and the advances he made in our knowledge of Indian animals are indeed little short of marvellous; while his investigations into the physical peculiarities and languages of the tribes of the Eastern Himalaya are alone sufficient to entitle him to immortal fame. For many years British Resident at the Nepal Court in Kathmandu, Hodgson enjoyed unrivalled opportunities for attaining specimens of animals at that time entirely unknown to European science, and the value of his collections forwarded to the British museum can scarcely be overestimated. Some idea, although an inadequate one, may be formed of the extent and magnitude of his labours from the length of the list of his zoological papers quoted by Sir W. W. Hunter in his life of Hodgson; the total number of these contributions to science bring no less than one hundred and twenty-seven. The zoological collections presented to the British Museum by Brian Hodgson in 1843 and 1858 comprised no less than 10,499 specimens. In addition to these, the collection also included an enormous number of drawings and coloured sketches of Indian animals executed by native artists under Hodgson's personal supervision. Of these latter the great bulk were subsequently transferred to the Zoological Society of London, by whom they

are carefully preserved. Of mammals alone no less than thirty-nine previously unknown species were described and named by Hodgson; among them being such peculiar and interesting types as the takir of the Mishmi Hills, the bhareel or blue sheep, of Tibet, the Tibetan gazelle, and the great Sikhim stag. It was also to his exertions that naturalists were first made acquainted with the beautiful Chiru, or Tibetan antelope, which is not improbably the natural prototype of the fabled unicorn and also with the wild argali sheep of Tibet which still bears his name.

Next in order we may take Dr. Hugh Falconer, who was born in Scotland in 1808 and died in London in January, 1865. For many years Superintendent of the Government Botanical Gardens at Saharanpur, Falconer is best known in connection with the mammalian fossils of the Siwalik Hills, which, in association with his friend Sir. Proby T. Cautley, he described and figured in that magnificent but unfinished work the "Fuana Antiqua Sivalensis." But in addition to being a distinguished botanist, Falconer likewise contributed to the modern Zoology of India. In June 1837 he started on a journey into Kashmir, Baltistan, and Ladak, in the course of which he was instrumental in making known to science the Kashmir stag or hangal, as well as the Markhor or great spiral-horned goat of the Western Himalaya. His description of the fossil elephants and Mastodons of the Siwalik Hills led Falconer to pay much attention to the structure of the living Indian elephant, and his account of that species is one of the most important and scientific that we possess. The life and labours of this distinguished naturalist are described in the "Paleontological Memoirs and Notes of Hugh Falconer," compiled by Dr. C. Murchison, and published in 1868. During his journey through Baltistan Falconer met, C. T. Vigne, an Englishman then travelling in the Himalaya and Baltistan, who subsequently published some notes on the mammals of that area, and in honour of whom one of the Himalayan species

of wild sheep *ovis vignei* is named. Vigne gave an account of his journey in a work entitled "Travels in Kashmir, Ladak, Iskardo, etc," which was published in 1842. A later traveller, Cunningham, in his work on "Ladak," which appeared in 1854, also devoted some attention to the mammals of this elevated region.

Reverting to earlier naturalists, we have to mention the name of General Thomas Hardwicke, who seems to have been mainly a collector of animals so far as natural history is concerned. He is but known by Gray's "Illustrations of Indian Zoology," which was published in London from 1830 to 1834, and is chiefly based on specimens in the Hardwicke collection.

Better known is Doctor Thomas Horsfield who was a resident physician in Java at the time of the conquest of that island by the British under Sir Stamford Raffles, by whom he was subsequently induced to take service with the Hon. East India Company. His earliest work, a systematic description of the birds of Java, appeared in 1820, but he subsequently published catalogues of the mammals, birds, and lepidopterous insects in the museum of the East India Company; the latter of these works being published between the year 1857 and 1859.

Although in later years more of a politician than a Zoologist, and for some time a member of the British Parliament, Colonel W. H. Sykes is entitled to a prominent position among the older Anglo-Indian Naturalists. Born in 1790, he entered the Bombay army and served under Lord Lake in 1805; retiring from the East India Company's service in 1837, and dying in 1872. His most important zoological works are catalogues of the mammals and birds of the Deccan, which were published by the London Zoological Society in 1831 and 1832, and are the earliest systematic lists of Indian animals in existence.

Of Dr. Theodore Cantor it must suffice to say that his period of zoological work occurred about the middle of the century. An account of the

zoology of the island of Chusan having been published at Calcutta in 1842, and a description of species of Indian eels at Batavia in 1853. He was chiefly occupied with Malay Zoology.

Sir Walter Elliot, who was born in 1803 and died in 1887, is chiefly known in the zoological world by a number of papers contributed to Madras scientific journals. His name is perpetuated in the scientific title of a Madras species of tree-shrew, as well as in that of an Indian dolphin.

Sir J. Emerson Tennent, whose connection with the island of Ceylon terminated in 1849, was one of the most enthusiastic of amateur Anglo-Indian Naturalists, and his "Ceylon," of which the first edition appeared in 1859, contains the best popular account of Cingalese animals and plants which has ever been published. He devoted especial attention to the pearl-fishery and the natural history of the pearl-mussel, and likewise to the structure and habits of the Cingalese variety of the Indian elephant. A special account of the mode of capture and taming of the latter animal was published in London in 1867 as a separate work.

Another resident in Ceylon who has contributed much to our knowledge of the Zoology of that island was Dr. E. F. Kelaart, who died in 1860. His most important work, "Prodromus Faunæ Zeylanicæ" was published at Colombo between 1852 and 1854, but was never completed.

We now come to Edward Blyth, who was born in 1810 and died in 1873, and who was perhaps one of the most talented and far seeing of the whole galaxy of Anglo-Indian naturalists. He was indeed in many respects a man whose views were in advance of his time. From 1833 till his death a continuous stream of literature relating to the Fauna of India poured from his pen, much of which appeared in the *Journal* of the Asiatic Society of Bengal, in the *Proceedings* of the Zoological Society of London, the *Ibis*, and the *Fields*. For a period of twenty-two years prior to 1864 he occupied the important post of Curator of the museum of the Asiatic Society of Bengal, in Park Street,

Calcutta; during which time he did much for the improvement and enrichment of the collection of which he published a catalogue in 1863. A catalogue of the mammals and birds of Burma from his pen was published posthumously at Hertford in 1875, together with a memoir of his life. During the latter years of his career Blyth devoted much of his attention to the wild sheep and goats of the Himalaya and Central Asia, and it is to him that the great sheep of the Pamirs owes its name of *Ovis poli*.

Born a year later than Blyth (that is to say in 1811), Surgeon-Major Thomas Caverhill Jerdon may be said to have done for the Fauna of India what William Yarrell accomplished for that of the British Islands, if we remember that while the latter never described the mammals, the former refrained from treating of the fishes. Jerdon who was born at Roxburgh, went to India in 1835, and died in London in 1872. His first work, entitled "Illustrations of Indian Ornithology:" appeared in 1844; and the first edition of the "Birds of India" from 1862 to 1864. Of the "Mammals of India" the first edition was published at Roorke in 1867. It is not too much to say that these two admirable works (which were not however, without certain weak points) first gave to the world an adequate idea of the extent and limits of the avian and mammalian fauna of India; and they have formed the starting point for all subsequent treatises on the same subjects.

While the reptiles were left for authors whom we still have with us, the task of compiling a complete systematic list and description of the fishes of India fell to the lot of Surgeon-General Francis Day. The first important work of Day on this subject seems to be "The Fishes of Malabar," which was published in London in 1865; and in 1878 this was followed by the more ambitious "Fishes of India," which long remained the standard treatise on the subject. The publication by Government of the "Fauna of British India," under the able editorship of Dr. W. T. Bland,

afforded, however, the opportunity for revising and bringing up to date his work on Indian fishes—a task which Day just lived long enough to accomplish.

The fauna of Burma did not come within the purview of Jerdon's work, and so far as British Burma (as then constituted) is concerned, this task was undertaken by the Rev. F. Mason, in a work published at Rangoon in 1860 under the title of "Burma, Its People and Productions". Mason who was, we believe, a missionary, does not appear to have had a very deep acquaintance with natural history so that this portion of his work partook largely of the nature of a compilation. A revised and enlarged edition of this work was subsequently issued under the editorship of Mr. William Theobald.

The next name on our list is that of Col. A. McMaster, who in 1870 published a small volume entitled "Notes on Jerdon's Mammals of India"; this was printed at Madras, and gave much additional information with regard to the mammals of that province.

Another observer who also contributed a series of valuable notes on the mammals of India, as well as on the birds, reptiles, and certain invertebrates, was Col. S. R. Tickell. These form twelve folio and two quarter volumes of illustrated manuscript, now preserved in the library of the Zoological Society of London, but were never published. To these notes Mr. Blanford was indebted for much valuable information when writing the volume on mammals in the "Fauna of British India." Tickell also contributed papers on the birds of India, Burma, and Tenasserim to the *Ibis* for 1860, 1861, and 1862.

A name of special brilliancy in the roll of Indian naturalists is that of Ferdinand Stoliczka, who although not entitled by birth to be classed as an Anglo-Indian can scarcely be omitted from the present list, not only on account of the high value of his work, but as having been a Government servant, with a post on the Indian Geological

Survey. Stoliczka, who for five years served the office of Secretary to the Asiatic Society of Bengal died at the early age of 35 in June 1874 on the return journey of the second mission to Yarkand under the late Sir Douglas Forsyth. In the "Autobiography and Reminiscences" of that diplomatist the following passage in relation to Stoliczka occurs:—"On the road to Yarkand last year this intrepid and indefatigable savant endangered his life by over-exertion when pursuing his geological researches at an elevation of nearly nineteen thousand feet, and in spite of intense cold. The journey across the Pamir was a severe trial to his enfeebled constitution, and on reaching the lofty Karakoram, Dr. Stoliczka exhibited signs of great distress. Undaunted, however, by all suffering, and too little heeding the warnings thus given, he overstrained his lungs and heart by toiling on foot up a mountain-side to make some scientific observation, and then, when he consented to be treated as an invalid, the injury was past all human skill to remedy, and he rapidly passed away." Stoliczka sleeps in the compound of the British Residency at Leh, where the present writer has on more than one occasion visited his tomb.

Although primarily a geologist and palæontologist, Stoliczka was an accomplished all-round naturalist whose loss to Indian Zoological science was almost irreparable. His collections, made by him during the Yarkand trip were described, with extracts from his notes, in the "Scientific Results of the second Yarkand Expedition", published by the Indian Government.

Henry Blanford, sometime meteorological reporter to the Government of India, likewise served as a member of the staff of the Geological survey for a portion of his career. Like Stoliczka, he displayed a great love for natural history, and accumulated a large and valuable collection of Indian land-shells, many of which he described.

A third departed member of the Indian Geological survey who cultivated certain branches of

zoology was Valentine Ball. Born in Dublin in 1843, he was appointed to the Indian Survey in 1864, in which capacity he served the Government for seventeen years. His first important volume "Jungle Life in India," gives a record of his travels and summarizes the results of his numerous papers. This work was followed by an elaborate treatise on the Economic Geology of India. His scientific reputation had by this time become so firmly established that on the resignation of the chair of Geology in the University of Dublin by the Rev. Dr. Haughton, Valentine Ball was appointed his successor. He was subsequently made Director of the Dublin Museum of Science and Art, a post which he held till his death in June 1895. Ball's zoological studies included anthropology and ornithology, and he accumulated very large collections of Indian birds during his geological tours. The ancient names of Indian animals was likewise a subject which attracted a considerable amount of his attention.

Another bird-collector who held out great promise of doing a large amount of valuable work, had his life been prolonged, was W. R. Davison, who died in 1893, while Curator of the Raffles Museum at Singapore, to which post he was appointed in 1887. Born in India, he was at first appointed to the Public Works Department in Burma, where he attracted the notice of Mr. A. O. Hume, the well-known Ornithologist, by whom he was for some time employed as a collector. Davison enjoys the distinction of being the only Englishman who is known to have killed a reputed wild gayal.

We have now to direct our attention for a few moments to three quondam officers of the Indian Museum, Calcutta. The first of the trio is Geoffrey Nevill, who fell a victim to consumption at a comparatively early age. Shells formed the subject of his studies, his most important work being the "Hand-list of Mollusca in the Indian Museum," of which two volumes were published between 1878 and 1884.

James Wood-Mason, the second of the two, who was Deputy-Superintendent of the museum under Dr. John Anderson, devoted his chief attention to insects and crustaceans; a Report on the Tea-mite and Tea-bug of Assam, which was published in London in 1884, being of considerable value in regard to measures for checking the ravages of two serious pests. Mason, however, by no means restricted his investigations to invertebrate animals; one of his discoveries being the presence of a chain of small bones in the orbit of the eye of the Indian hill-partridges of the genus *Arboricola*.

The last of the trio of officers of the Indian Museum is Dr. John Anderson, whose death, at the age of sixty-seven, took place so recently as August last. Anderson was the first Superintendent of the museum in Chowringhee; and one of his first duties in that post was to supervise the transfer from Park Street of the old collection of the Asiatic Society of Bengal, which at this date had become Government property. This onerous duty he fulfilled to the satisfaction of all concerned. Anderson accompanied two Government expeditions to Yunnan in the capacity of naturalist; and the natural history results obtained were described by him in a bulky volume entitled "Anatomical and Zoological researches." In addition to much other valuable work, he wrote Part I of the catalogue of the mammalia in the Indian museum. Whales and dolphins always attracted much attention on the part of Anderson, who had the good fortune to describe a new species of porpoise from the Irawadi, while he believed he had evidence sufficient to justify the description of a new finner whale from the Indian Ocean.

In contrast to the mighty denizens of the deep which formed one of the favourite studies of Anderson, the researches of Dr. George Edward Dobson, of the Indian Medical Service, were in the main restricted to the bats and other insectivorous mammals, although he likewise paid a certain amount of attention to the rodent, or gnawing mammals. His first important work on bats was

the "Monograph of the Asiatic Chiroptera, and Catalogue of the species of Bats in the collection of the Indian Museum," which was published in London in 1876. Two years later this was followed by a British Museum Catalogue of Bats, containing a description of every known species. His next work was a "Monograph of the Insectivora," of which the first two parts were issued in 1882 and 1883. Of both these groups Dobson had probably a greater knowledge than any other man at that time; and his death, which occurred during the last decade of the century under peculiarly painful circumstances, was a great loss to Zoological science.

Of Anglo-Indian sportsmen who have contributed in a greater or less degree to the advancement of natural history, two only can be mentioned here. Of these the first is Captain James Forsyth the author of that charming book "The Highlands of Central Asia", a work which reached its second Edition in 1872. It contains much valuable information about the mammals and game birds of the great Sal-forest of the Narbada country, and forms a pleasant record of the wanderings and experiences of an observant sportsman. G. P. Sanderson, the second of the two sportsmen in question was for several years superintendent of the elephant keddass, and by his untimely death the Indian Government lost an energetic and valuable servant. His chief hunting experiences were in Mysore; and his one work, "Thirteen years among the wild beasts of India" was published in 1878, and is a mine of information concerning the habits and mode of life of many of the larger Indian wild animals. The mode in which tigers attack and kill their prey was one of the subjects which attracted much careful attention on the part of Sanderson. A second was the habits of the great Indian wild ox, or gaur. But his duties gave him exceptional opportunities of becoming intimately acquainted with the mode of life of the wild elephant, and his account of this animal is perhaps one of the most valuable we possess. Up to his time very exag-

gerated notions obtained as to the height attained by the Indian elephant, and Sanderson showed that the ordinary estimate must be very largely discounted. Like many reformers, he, however carried his limitations somewhat too far; and it is now well known that elephants occasionally attain considerably larger dimensions than Sanderson was at one time prepared to admit. In many respects Sanderson may be compared to the great African *Shikari*, Mr. F. C. Selous, the prime object of pursuit by both men being the elephant.

R. LYDEKKER.

THE INDEBTEDNESS OF INDIAN RYOTS.

HERE is no doubt one great danger to be guarded against in giving full proprietary title to the *ryots* under the *ryotwari* tenure, and the Famine Commission presided over by Sir A. Macdonnell, whose report has come to hand since my last article on "Land Settlements in India" appeared in the February number of this Review, has given due prominence to the fact. This is that the tenants, living, as they generally do throughout India, from hand to mouth, and having no capital to fall back upon in case of necessity, or even to supply what is required for actual cultivation, are exposed to the great temptation of being able to borrow on the security of their lands, a temptation into which the ordinary money-lenders of the country, who are their bankers, are generally by no means averse to lead them into. The Commission report that in the four Bombay Collectorates which are most exposed to famine in consequence of the frequent failure of the S. W. monsoon in that region, east of the Syhādri range or Western Ghāts, about one-fourth of the land has been alienated to non-agriculturists, chiefly money-lenders, through its having been mortgaged to the latter as security for loans, and that the original tenants have virtually become their serfs.

This is no doubt a very undesirable state of affairs, and one certainly not anticipated by the originators of the Bombay Survey Settlement system, who, although willing that the most impoverished class of the agriculturists should by degrees make way for capitalists who would expend their capital in the improvement of the soil, never thought the land would pass into the hands of ordinary money-lenders whose bent was not in that direction, and who actually, being as a rule foreigners, most unwillingly incur the trouble and responsibility of landlordism. This is proved by the fact that, notwithstanding a distinct provision in the village account system of the Presidency for the entry of the actual proprietors' names on the occurrence of a change of ownership, those of the original tenants are still as a rule continued in the village books. The nominal proprietor as so recorded being the person to whom the Government looks for the payment of its rents, this tends to hold the debtors irretrievably fast in the money-lenders' hands.

The Commission, however, have failed to trace the real cause of the late rapid increase of the *rayats'* indebtedness and the consequent alienation of their lands. Before the Indian Limitation Law of 1871 was enacted, debts due on ordinary debit and credit accounts were recoverable up to 12 years from the date of the last transaction, and this period was reduced by that law to three years. The result of this assimilation of Eastern and Western ideas became evident at once. The money-lenders, finding the time within which they could recover their debts suddenly reduced to one-fourth, naturally began to press their debtors and force them to sign bonds, in many of which the latter's lands were mortgaged, and to sue them in the Courts of Law, and in four years, viz., in 1875, the agricultural riots, which led eventually to the passing of the Deccan Agriculturists' Relief Act, broke out. These were not in any way directed against the Government, but solely against the money-lenders, whose account books and bonds were destroyed wholesale. Matters in this respect have

not improved, for whereas under the old system the period within which debts on current accounts could be recovered was sufficiently long to admit of the parties coming to a mutual understanding, the present law forces the money-lenders to keep up a continuous pressure for their recovery, and in such seasons of scarcity as have occurred recently, to bring their debtors more completely into their power. Add to this that in order as far as possible to prevent loss of revenue to the State, collectors of Land Revenue are apt in such seasons to postpone the collection of instalments in order to give the *rayats* time to meet their liabilities, in hope of realizing them at a later date. Zealous village accountants (*kurnam, talati, kulkarni*), lynx-eyed, watch the movements of such defaulters, and drive them more and more into the power of their creditors: they never cease from troubling and the weary *rayat* has no rest.

What are the remedies for this state of matters? In the first place, postponement of collection of revenue should be brought within the narrowest possible limits, and when a defaulter has no expectation of being able to pay up his debt out of the proceeds of a later crop, the remission of rent should be at once made absolute so that the *rayat* may not have to resort to his banker. Other remedies are a reversion to the old 12 years' limit for all money transactions between *rayats* and money-lenders, and giving power to the Courts of Law to go behind the contract contained in any bond, as has lately been done in England, instead of enforcing it as it stands. It is quite possible that if the law of collection is strictly enforced against the new proprietors whose names have not been as yet recorded in the revenue books, and the two other remedies noted carried out, a large number of the existing mortgages of lands will be voluntarily cancelled, and new ones prevented for the future, when the 12 years' period for recovery of debts is restored. At all events, the idea is worth a trial. A much more drastic remedy has already been carried out in the Panjab to prevent the alienation

of land, viz: to forbid it altogether in certain cases and this has been followed up to a certain extent in Bombay by enacting that the revenue authorities may in the case of land that may be forfeited for non-payment of rent or other cause, relet it for a shorter period than 30 years, the usual term under the Survey rules, without the right of alienation. This, it may be observed, cuts two ways; it will prevent alienation, but it will also lower the value of the security on which capitalists would be disposed to spend money on the improvement of the land, and thus retard the advancement of the country. The measure is thus one of very doubtful expediency.

The Commission go further than this. They propose (para 342 of the report) that:—

1. The account between debtor and creditor should be investigated, and a fair sum should be fixed to be paid by the former to the latter in liquidation of the debt.

2. The average produce of the holding should be ascertained, and its money value should be expressed in cash.

3. The surplus produce, after providing for the subsistence of the cultivator and his family and the necessities of cultivation, should be appropriated to the payment of debt, provided that such appropriation shall not be continued after the lapse of a term of years.

In substitution for 1, 2 and 3 the holding should be made over, at the land tax assessed, to the creditors in usufructuary mortgage for a term of years.

In either case the holding should be declared free of debt at the end of the term. A procedure similar to this was ascertained to be followed in Rajputana, and, it might have been added, in Guzerat and other parts of the country as well.

Together with these remedies must be associated the improvement of the general status of the people by education, and that of their credit by the establishment of agricultural banks throughout the country in order to compete with the usurious terms

insisted on by the money-lenders, the idea of getting rid of whom altogether is simply absurd; for, the agriculturist must necessarily have his banker as well as any other professional man. Education is, of course, receiving every attention at the hands of the Government of India, who have also appointed a Committee to report on the best method of introducing the system of Agricultural Banks, which will of themselves be an excellent means of education to the people in the matter of thrift and self-reliance. For these to be effective, however, it is evident that their working should be entrusted as far as possible to the people themselves, and that they should be hampered as little as possible by the interference of Government Officers. The maximum of such interference should consist of the regulation of the general system and a periodical audit of the banking accounts by state auditors. The preliminary report of this Committee contains the germs of a really effective system, one which the present writer proposed more than three years ago, which will, if properly worked, rehabilitate the credit of the Indian agriculturist who may not be already too deeply sunk in the mire of debt, and give him hope for the future. Sir A. Macdonnell and his colleagues could hardly have considered the herculean nature of the undertaking they propose for putting the *rayats* on their legs again, and we cannot go farther with them in their proposal than to suggest that it should only be attempted, if at all, in the case of agriculturists who are not indebted to a greater extent than would be covered by the proceeds of a single year's crops.

A. ROGERS.

Tales of Indian Chivalry.

BY

MICHAEL MACMILLAN,

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AT THE TEMPLE.

I.

ANY ambitious young men, anxiously seeking for new paths in life, and eager to distinguish themselves in pastures fresh and untrodden ways will doubtless be glad to know something of life at the Inns of Court, whence year by year so many fully fledged Barristers issue forth to seek name, fame, or perchance a decent livelihood, in all quarters of the globe, far and wide as the British Dominions extend. Indeed nothing can be more cosmopolitan than these fine old Inns, for here you meet the Hindu and the Mahomedan rubbing shoulders with the West Indian and the Boer from South Africa, the Gaul and Teuton vieing with the Celt and the Saxon; all castes, colors, and creeds striving to obtain the much coveted "call to the Bar" which enables them to practice in Europe, Asia, Africa, or America, wherever the Union Jack floats proudly in the air.

The Rules and Regulations issued by the Legal Council of Education, and the Benchers of each Inn, furnish the husk or "dry bones" of information regarding the course of studies, terms to be kept, and fees to be paid in connection with a "call to the Bar"; but I am not aware of any source from which a would-be student may obtain a knowledge of the details of the whole cost, the daily routine, and other necessary facts connected with life at the Temple; hence a brief article on the subject by one who knows all about it, may not prove uninteresting nor altogether profitless.

Probably most people are aware that there are four Inns of Court designated respectively the Inner and the Middle Temples, Lincoln's and Gray's Inns; the two former occupy a commanding position on the bank of the Thames, in adjoining demesnes, while the other two are situated a little way off, in Chancery lane and Gray's Inn road. Each and all of them possess

charming grounds or "compounds," with smooth green lawns, and pretty flower-beds intersected by clean white garden-paths, some of which are thrown open to the public during summer; an air of perfect quiet and repose pervades these domains, in marked contrast to the roar and racket of the streets which lead to them, and the pages of Dickens and Thackeray portray the beauties of these charming oases in the vast city, with a zest which betokens the delight these great authors felt amid these peaceful retreats from the noise and bustle of life. I do not know that there is much to choose between any of these schools of law, but the Inner Temple men are popularly supposed to be wealthy enough not to care much about studying very hard, though they have the best Library of the whole, which is counterbalanced by the noble Hall of the Middle Temple. The other Inns are smaller, but for some inscrutable reason, are more patronized by students from "India's" coral strand than the Temples are. To some it may be news to know that these Temples are so called from the ancient Knights Templars who built them, and who combined in their own persons not only warlike but ecclesiastical functions; hence there are fine old churches attached to the Inns where Sunday services are held during the terms, attendance at which is of course optional, and where the sexes are punctiliously divided from each other by high-backed pews, which effectually prevent wandering thoughts and wicked propensities to flirting in church.

II.

My recollections and reminiscences will be confined to the Middle Temple, which I am best acquainted with, and regarding which I quote the following description from the "Guide to London":—

"This is one of the most interesting and remarkable places in the City of London. Between busy Fleet Street and the broad Embankment, are a venerable church, Gothic halls, piles of stately buildings, dull old quadrangles, spacious lawns, clumps of old trees,

blooming gardens, and a shady nook, where plays a little fountain in the midst of rockeries and flowers. There is hanging about the Temple the flavour of a university town; with its groups of colleges, mingled with associations of the old Crusading times, and especially with the literary history of the eighteenth century. The old world and the new are strangely commingled. Nine Crusaders with cross-legged stone effigies on their tombs have been lying silent enough for six hundred years, and the gardens near them resound on a summer evening with the merry laughter of hundreds of little children allowed to play there by the Benchers, the principal authorities of the Temple. In 1184 the Knights Templars, that remarkable order which combined something of a priestly with a very decided military character, removed their principal London house from Holborn to the banks of the Thames, and built the famous church which we may visit to-day. After the abolition of the order in 1313, Edward II gave the property to Aymer De Valence, Earl of Pembroke. He did not retain it long, it passed to the great knights of the order of St. John of Jerusalem—the Hospitallers—who rivalled the Templars in valour, but who were more fortunate than they, and did not so soon fall into the bad books of the kings and other great ones of the earth. This community soon afterwards, in 1346, leased portions of the estate to the doctors and students of the law—and they have ever since retained it. In 1608, James I abandoned his royal right to the property in favour of the corporation of the Inner and Middle Temple.

Middle Temple Hall built in 1572, in which the Benchers and students eat their dinners, is worth visiting. Until recently the eating of a certain number of dinners in hall was, with the exception, of course, of the payment of certain fees, almost the only necessary preliminary to a call to the bar. The hall was built in the early part of Queen Elizabeth's reign, from 1562 to 1574, under the superintendence of Mr. Edward Plowden, the

treasurer; and it is one of the finest edifices of its kind. The interior nobly proportioned, a hundred feet long, forty wide and forty-seven high, has a roof of dark oak richly carved, and windows emblazoned with the arms of distinguished members of the society. It is adorned with a beautiful screen of carved oak, erected in 1575, at the lower end with Vandyke's fine portrait of Charles I on horse-back, with other portraits of seventeenth-century kings and queens, and with a collection of armour. The hall has been, and is so still—the scene of costly entertainments. Queen Elizabeth visited it on the occasion of a masque in which Dudley, Earl of Leicester, took part. Shakespeare's Twelfth Night was first performed there, he himself being present, and probably one of the actors; it is the only place now existing, in which a play by Shakespeare was acted in his life-time, and at the Christmas festivities held here, learned lawyers vied with the young students in uproarious merriment.

The Middle Temple Library opened by the Prince of Wales in 1862, is a very elegant building in the Gothic style, and contains 35,000 volumes. The interior is about eighty feet long, and nineteen high. The Hall of the Inner Temple was rebuilt by Sydney Smiker, and opened in 1870 by the Princess Louise, Marchioness of Lorne. The interior is ninety-four feet long, and forty high, and it has an extremely beautiful moulded roof. There is an interesting old crypt beneath its northern end.

There are two Gardens about five acres in extent, laid out with lawns and flower-beds, now very interesting in late autumn on account of the famous show of chrysanthemums, these flowers being a special favourite of the gardener. Shakespeare has made the old garden of the Temple historically famous as the scene of the quarrel between Plautagenet and Somerset, when the white and red roses, those fatal symbols of civil war—were plucked and adopted as badges. In Fountain Court, in

the Middle Temple—a prettily laid-out corner near the entrance from Devereux Court, is a little fountain which Dickens has made memorable in that pretty chapter of *Martin Chuzzlewit* in which he tells us how Ruth Pinch went to meet her brother Tom in the Temple, and there encountered John Westlock. But the little fountain described by Dickens, and by Thackeray in his *Pendennis*, has been improved and is all the worse for the operation.

The Temple is associated with the names of many eminent persons only remotely and in some cases not at all, connected with the legal profession. Among these are Sir Walter Raleigh, the dramatist Ford, Beaumont, Fletcher, Wycherley, Congreve, Burke and Sheridan. Dr. Johnson lived for some time in Inner Temple Lane, a new stack of houses, "Johnson's Buildings," marked the spot. Goldsmith died in Brick Court, and was buried in the Temple church-yard. His tomb has been restored and is now with others outside the railing of the church. Charles Lamb was born in the Temple.

The Temple church is one of the most interesting ecclesiastical edifices in the metropolis. It is divided into two parts, the round and a rectangular choir, where the service takes place. The former built in 1185, on the plan of the church of the Holy Sepulchre at Jerusalem, is in the Transition Norman style; it is fifty-eight feet in diameter. It was consecrated by Heraclius, the Latin patriarch of Jerusalem. After various vicissitudes it was carefully renovated about the middle of the nineteenth century, the entire edifice being then restored to its original beauty. The porch is especially admired. There are nine tombs of Crusaders with recumbent figures in complete armour. Among them is the grave and monument of William le Marshall, protector of England during the minority of Henry III. Selden, the great writer on *International Law*, is buried to the north of the altar, the spot being marked by a monument of white; and among more recent celebrities who

were connected with the Temple and have monuments to their memory in the church, may be mentioned Lord Eldon, Lord Chancellor Thurlow, etc. When the church was last restored, a double piscina of marble was discovered near the east of the south side, and a picturesque Gothic niche on the north side of the building. On taking up the modern floor, portions of the original tessellated pavement were brought to light, and there were found some remains of ancient decorative paintings and rich ornaments worked in gold and silver. Above the western doorway, a charming Norman window composed of Caen stone was opened out and within the walls of the church there was found a penitential cell; a dreary place of confinement four-and-a-half feet long, two-and-a-half wide, with a narrow opening through which the choir is seen. In this narrow prison disobedient brethren of ancient Templars were temporarily confined in chains and fetters, and there is a grim tradition that knights who had broken their vows were imprisoned here and starved to death, while day after day the services of the church were chanted in their ears. The triforium is a circular gallery containing many interesting monumental inscriptions, and lighted by Romanesque windows over Norman arches. Clusters of pillars support the vault. The choir in the Early English style has a very fine interior, and a large east window, and its roof is painted with arabesques.

III.

To begin at the beginning, I would recommend those who are not pressed for time, and who feel disposed to have a glimpse of the Continent of Europe, to travel by the boats of the "Ordinary Service" of the "Austrian Lloyds" which leave Bombay on the 7th of every month, and on which a very comfortable passage can be secured for Rs. 325; the voyage by these boats occupies nineteen days, and passengers are landed at Trieste in Austria, whence the traveller may undertake a very pleasant and easy journey through Venice, the Queen of

the Sea, Milan with its magnificent Cathedral of hundreds of spires, each one surmounted by a statue; lovely Lucerne, where snow-clad peaks and charming lakes make up the most splendid scenery in the world; Basle, and gay Paris, across the English Channel to London, the hub of the Universe. Should our student prefer a quiet uneventful voyage, he may book direct by the P. and O. steamers from Bombay, or the B. I. S. N. vessels from Madras, at a cost of Rs. 600 to 700 first class, or Rs. 300 to 400 second class. Arrived in London, it is necessary to enter at one of the Inns, for which the requisite qualification is the passing of any public examination in England or India; matriculation at one of the Indian Universities sufficiently fulfils this test but if the student has not thus qualified, he must pass a preliminary examination in

I. English,

II. English History, and

III. Latin.

If he be a native of India he may under special circumstances be excused from passing in Latin. He then pays a sum of £50 as an entrance fee, and either deposits another £50 to provide for the regular payment of future fees and expenses, or else furnishes two English householders as security for such payments.

There are four terms in each year, viz.

I. Michaelmas, which occurs during the month of November.

II. Hilary, in January.

III. Easter, middle of April and May.

IV. Trinity, June.

Then comes the long vacation which lasts until November again. The best term in which to join is the Michaelmas term in November, as the student thereby avoids one long vacation, and can finish his course within two and a half years by putting in the twelve terms which he is required to keep, from November of one year until June of the third year.

The Dining fee which opens the doors of the Dining Hall to the Student, amounts to £1 per

annum, and as not less than six dinners must be attended each term, the cost of these at two shillings amounts to 12 shillings, plus two more for the hire of a gown which every student has to wear during dinner.

On being admitted, three cards are given to each student, one of admission to the lectures, a second to the Dinners, and the third to the Library, a 'term fee' of 10 shillings a quarter is payable and the student is entitled to the use of a common room, below which is a magnificent reading room where all the leading newspapers and magazines lie on the table, a writing room, cosily furnished; and a smoking room where chess is often played by those who care for the game; there are also lavatories provided with hot and cold water, and a refreshment room where comestibles of sorts can be procured at much less than the usual restaurant prices, a pot of good tea for three pence, with which a slice of cake is sometimes thrown in if the caterer be in a good humour.

IV.

Dinner is served in the hall daily at 6 P.M., but as I said before, a student is only required to be present at six dinners per term. Arrived at the hall he dons the gown which he hires there, and hurries in to secure a seat at one of the tables; four men form each mess, which is presided over by any one of them who is called the "Captain" and through whom alone orders may be given to the waiters, so as to avoid noise and confusion. The Dinners are very good for the amount charged for them, consisting of soup or fish, a roast or boiled joint of beef, mutton or pork, with puddings and tarts according to the season; half a bottle of wine is also supplied to each dinner, and he may order more liquor of any kind at his own expense. Grace is said by the Chaplain, commencing with "The eyes of all things wait upon Thee O Lord," and it is necessary that every student should be in the Dining Hall during grace; both before and after meat; otherwise his attendance does not count. The Benchers are either Judges

or Barristers of standing, who form a committee of management, and are allowed magnificent suites of rooms in the Temple free of rent; these magnates dine in the Hall at separate tables, somewhat raised above the others, and it is not good form for the student to rise before the Benchers from the tables. On what are called "Grand Nights," distinguished men are invited to dine, and champagne then accompanies an extra good dinner. The Prince of Wales, Generals of renown, and other public men are thus invited; on one occasion when Lord Wolseley was present, the electric lights suddenly went out, leaving the guests in darkness; but a miniature torch light illumination was at once extemporized by means of wax vestas which each student lighted and held up until the installation was put in order. Very little speechifying goes on, probably because lawyers prefer to speak when they are paid for doing so, or perchance they have enough of it in Court. Some of the students who have caste or religious scruples against partaking of meat, confine themselves to soup and vegetables, though even then a man is not safe, for there is a good story told to the effect that a devout non-flesh eating student when partaking of some innocent looking clear "vegetable" soup, was horrified to find a scrap of bone in it and at once warned his companions "to 'ware soup." Of course although attendance at dinner is compulsory, eating is not; and a very orthodox man may enjoy the "feast of reason and the flow of the soul," while he refrains from partaking of more mundane and solid refreshment. The primary object of these dinners is to evoke a feeling of *esprit de corps*, and give the students a social training in company with their fellows, whom they would otherwise have little or no opportunity of meeting.

V.

The days of "eating" one's terms as the sole, or even the most important qualification for a call to the Bar, have long been numbered with the legends of ancient history. Real hard study is now absolutely

necessary in order to qualify for a pass, and the examinations have year by year been increasing in difficulty until they are quite up to, if they do not exceed, the Standard of the London, LL. B. There are four Branches, in each of which a separate examination must be passed; these are:

- I. Roman Law.
- II. Constitutional law and legal history.
- III. Evidence, Procedure and Criminal law.
- IV. "Finals" comprising Real and Personal Property Common law, which includes Contracts and Torts, Mortgages and Equity.

All but the "Finals" may be taken up at any time after joining the Temple, but the finals can only be entered after the expiration of six terms. Any or all may be taken together, or separately, but if IV, is taken with any other branch, no credit is given for any (even if passed) unless the candidate succeeds in getting through. As there are three years (or at least 30 months) in which the student may pass his examinations, the chances of getting through creditably being thus enhanced. If a student gains more than 50 per cent. in *each* subject, he is entitled to "Honors," and the Middle Temple gives £50 as a prize to each of its students who gains "Honors" in order to encourage its *alumni* to strive for them. Twice a year a scholarship of 100 guineas per annum, tenable for 3 years, is awarded at the discretion of the Council of Legal Education, to any student who may pass exceptionally well. After the whole of the Examinations have been passed, twelve terms kept, and a fee of nearly £100 paid, the student is called to the Bar, and becomes a full fledged Barrister-at-Law. On "Call night" the passed men hire wigs and gowns in which they present themselves before the Benchers assembled in state in the Hall; the Treasurer addresses to them an exordium filled with good advice (which is not always followed); the passed men are called up by name, and affix their signatures to the Roll; after which "call parties" are

held, and champagne and other wines flow freely ; next day the callow Barristers attend the Royal Courts of Justice, where they sign their names, and are then free to practice in any part of the British Dominions, and to sink or swim according to their merits or luck.

VI.

A few words regarding the accomodation available for students from India, may not be out of place. Many young men unfortunately make shipwreck of their lives at the very outset by devoting too much time to pleasure, and too little to study ; and it is important therefore for those who are starting on the voyage of life to get into a "good set" from the very beginning of their career. There are very nice respectable boarding houses in Russell Square, near the British Museum which is situated at a convenient distance from the Inns of Court, but the charges are somewhat high, averaging two guineas per week. At Kensington and other suburbs very fair board and lodging may be had for half this sum, a little extra has to be allowed, however for rail or bus fares. On the whole I would roughly estimate a student's expenses as follows :—

	£.
Moderate outfit, and travelling expenses from and to India	75
Entrance and call fees	150
Term and Dining fees	15
Board and lodging at one guinea per week, for three years, or 156 weeks	164
Miscellaneous expenses, such as bus fares, stamps, stationery, etc. at one guinea per month	38
Clothing at £ 10 per annum	30

Total £. 472.

or in round numbers £. 500, amounting to about Rs. 7,500, is the very lowest figure at which a student may fix his expenses for a three years' course. If he be dilatory or neglectful, he must of course reap the consequences by enhancing his expenses ; but any young man of average ability and steady habits, can count on securing a pass even if he does not succeed in securing Honors.

C. CRESS,

THE ETHICS OF BRIBERY.

BRIBERY and corruption are synonymous terms, and if morality is virtue then morality cannot be associated with bribery. Notwithstanding this, there are some minds which, by a perversion of thought, do associate such evident contradictions. With such people the acceptance of illegal gratification has a moral side. In receiving what, in the law's nomenclature, is a bribe, they maintain that they do no wrong ; and they even go a step further and hold that, by accepting what is called an illegal gratification, they condemn justifiably an attempt to vitiate the ends of justice. That is, they claim to be doing positive good. Corruption is the curse of India. There is corruption in other countries, but not to the extent that it is found in India. Here, it is reduced to a fine art ! There is not a single department of the Services, not one commercial transaction, probably no official social function, that is not blackened and dishonored by greed and covetousness. There is no obligation on my part to ascribe causes for this state of degradation. They must be obvious to those who are acquainted with the history of this country for centuries past. It is the invariable consequence of repression—of force. A people that cannot assert its rights must purchase them. The individual who has not the courage to demand, the power to enforce compliance with his demands, and who is not prepared to "do right, because right is right, in scorn of consequence" has no alternative but to attain his ends by purchase. Individuals make a people. If no bribes are given, bribe-takers and bribe-seekers would cease to be. It is absolutely useless for administrators to try and stamp out corruption, where a whole people is corrupt and bent on undermining the honesty of public servants. Somebody has said that 'every man has his price.' He assuredly has. As long as humanity is what it is not, divinity, every man has his price. If it is not money, it is something else: flattery, friendship, kin, subservience, land, women, what not. Some

of these things may not, in the law's sense, be illegal gratification; all the same they serve to warp us from the right, to lead us, ever so little it may be, astray. It is nearly impossible, indeed quite impossible, to predicate any course of action where motives of some kind, right in one respect, sometimes wrong in another, do not come into play and it is as impracticable to detect or punish the person whose motive is a wrong one, unless it takes the form of one of those amenable to the provisions of the Penal Code. It is a common fallacy that the bribe-taker is more criminal than the man who offers the bribe. It seems to me that the act of the latter is much more reprehensible. Circumstances alter facts, and corruption, when it assumes the forms of extortion and oppression, is a crime of the deepest dye. But this is comparatively rare, and more often than not it is the other way about, bribes being, mostly, voluntary. In such cases the briber should always be more severely dealt with than the receiver. The difficulty of differentiating is difficult. Whatever be the causes that have so firmly established bribery in India the fact remains that the giving, or receiving, of bribes incurs no popular reprobation. The native official who is known to receive no bribes is considered a poor, spiritless creature who wastes his opportunities. Curiously enough, the European official is invariably expected to be above bribe-taking. He loses vastly in public estimation and is despised if he is known to be a bribe-taker. The native official who takes bribes is considered, on the other hand, a smart, a clever man, whom it is worth while to conciliate and keep on friendly terms with. "Who cares" said a ryot to me "to be friendly with a scrupulous official who does his duty? I would rather make a friend of a man who is unscrupulous; he would keep me ~~as~~ a pinch." If there is little or no reprobation against an official—a native official I mean—receiving bribes there is none at all against the briber. It is in the natural order of things that, in a criminal case, one should want to escape, and he who can get off by purchasing

immunity by a bribe and does not, is a fool. Similarly in civil cases, it is quite natural that one should want to win, and if the expenditure of a few rupees in the shape of bribes enables a suitor to win, it is quite legitimate to purchase the victory. In such cases the loser does not dream of blaming the unjust judge who decided against him; he merely deplores his inability to out-bid his opponent. There is no exaggeration in these statements. Every reader who knows anything of the mind of the masses of India, will bear out my statements. The cases of bribery that come to light are cases of extortion generally, where actual inpecuniosity on the part of the oppressed man, or where no adequate return is made by the extortioner, are the springs of action which lead to exposure. As stated before, there are bribes and bribes; and in this paper I do not consider it necessary to deal with bribes which, according to the law, are no bribes, so to speak. A letter of recommendation to a magistrate may possess all the force of a bribe. It all depends on the position of the person writing it. The appointment of a particular candidate may be due to caste, or class bias, friendship, kin, revenge against another, personal liking, or any similar cause. Occasional aberrations of this kind excite no remark, but accumulated instances lead to sure detection and public censure. The law manifestly is helpless to punish where public opinion is the only potent weapon capable of dealing out punishment. Cases in which there is a complete absence of material benefit, immediate or remote, but where some selfish motive is the spring of an unjust action illustrate the psychological side of bribery. But, as said before, it is not necessary to discuss the matter here. What I am immediately concerned with is the bribe which comes within the provisions of the Penal Code, and I wish to show that, not only is it nearly impossible to suppress corruption where the people are corrupt, but to illustrate, as far as I am able, the opinion of many otherwise worthy and respectable men on the subject. Before going further it is necessary to

assert again that, ninety-nine out of every hundred people, in South India at all events, took upon bribery as a legitimate means of earning money, of evading the consequences of wrong-doing, or over-reaching an opponent. The mother of a man, or his wife, will often taunt the breadwinner with incapacity, should he fail to add to his legitimate earnings, money obtained illegitimately. We have all heard of perquisites. The leavings at table are, in generously conducted households the perquisite of the table servants, and, as such, there is no discredit in taking them. They often serve to feed a family. A factory hand besides his pay is often permitted to have fuel and oil for nothing. These are true perquisites. But the *Varumanom*, the perquisites, that attach to an office in India, is a subterfuge for actual bribery and speculation. The duffadar of a Collector may get 10, or 12, rupees a month, but his *Varumanom* is often twice that sum. His tips are given to him always with an object in view. The Forest-guard who gets 8 rupees a month will boast of his *Varumanom* as 10 or so. He winks at smuggling and levies blackmail for infractions of the law, on forest produce, to swell his income. The beat Policeman makes a *Varumanom* out of nuisance cases and gets *buk-sheesh* from the bazaarman for being blind to short measures, and for aiding and abetting trickery and cheating. In the grades of service a step or two higher—the D. P. W. Overseer will receive his *mamool* commission of 10 per cent. from road contractors for bad or short material, and thank God that he is not as other men are—an extortioner, covetous and greedy. The Police Inspector will be blind to the doings of his Station-house Officer if he receives a monthly, or quarterly, stipend in the shape of some sovereigns, a pair of bullocks or a travelling cart; and so it goes on. It is all *Varumanom*, which causes no qualms of conscience, raises no doubts, runs little or no risks of discovery. I remember once conversing with a Christian Overseer, a respected member of the Department of Public Works—who, by the way,

was a Roman Catholic of most steadfast piety—and asking him “How he was getting on?” “I am all right thank you” said he “but dreadfully hard up. My wife’s illness has run away with all my earnings which I made on the—Project. Lately, no original works have been going on, and I hear that very soon work will be taken in hand on the—road. I wish”—here he placed his hand on his breast and raised his eyes to Heaven—“*that God will give me an opportunity of making some money.*” It must be understood that my Christian friend was on the Permanent Establishment of the D. P. W. earning a fairly good salary, and that by his appointment to the road he longed to be on, he would not be given one extra pie. He wished “to make money” i. e., to make it illegitimately, and his invocation to the Almighty to keep him is distinctly instructive. It is only equalled by the bandit of Italy praying to the Virgin to help him in his piracy and promising to deck her shrine with his spoils. The Overseer was an Eurasian and it never crossed his mind, for one moment, that to make money from the Public revenues was wrong or reprehensible. He would argue that the contractor gave him a stereotyped commission which he was doing no wrong in accepting. He was oblivious to the fact that contractors do not give a commission unless for a *quid pro quo*. This moral obliquity of vision in bribery cases is something phenomenal, as I shall show in the following dialogue which is, more or less, a true reproduction of a conversation I have listened to:—

A is the moralist, B is the Magistrate—and we shall let A commence the attack:—

A.—“We were talking of bribes and bribery, a while ago, and I fancied that,—pardon me, if I make a mistake—that, you are somewhat inclined to condone bribery.

B.—That depends, on what you mean by bribery.

A.—What? Would you wink at bribery in any form? Let me cite an instance. Suppose a case of partition of property, of libel and defamation of character, or any similar dispute, where the opinion of the judge carries considerable weight, apart from the evidence on record, comes before you as a judge, and a bribe were offered by

one party, would you receive the bribe and think it no harm?

B.—I would receive the bribe, and still do justice.

A.—What! If for instance one party offered you Rs. 500 to decide in his favour? Honestly?

B.—Provided there were no witnesses I should receive the bribe. Rs. 500 goes a long way.

A.—And you would pollute justice by deciding the case in his favour?

B.—You jump to rash conclusions, my friend. I would still do justice, and it would please me greatly if I could conscientiously decide against the man who offered me the bribe.

A.—Would that be just—honest?

B.—Certainly with regard to the case itself. As regards the briber, it is no question of honesty or justice. He is dishonest, inasmuch as he hoped to influence me to act falsely by offering me Rs. 500. Possibly he has the strongest case, but in his anxiety to over-reach, or ruin, his opponent, he is willing to sacrifice the money. Generally speaking the man who has the weakest case does the bribing. Often it is the man who has the longest purse. In either case, I am invariably prejudiced, not in the briber's favour, but against him!

A.—Then a bribe does influence you?

B.—Well, yes! But *not* in the sense you mean. Your idea is, apparently, that I decide in favour of a man *because* I am paid a bribe to do so.

A.—That was my impression, but accepting your statement about being prejudiced against the briber as correct, I conclude that a feeling, not altogether judicial, not wholly impartial, manifests itself.

B.—Perhaps! But facts and evidence are stubborn things, while the Superior courts exercise a wholesome check on individual vagaries. I make it my duty to decide simply upon the evidence and the probabilities of things. In any case, even if the prejudice which you condemn as non-judicial and unjust, sways me—and being an honest man, I confess that your objection has some weight do I not punish a rascal who has dared to tamper with the honesty of a just judge?

A.—Would it not be better to hand him over to justice by getting him prosecuted for attempting to bribe you?

B.—By advising such a course you exhibit, my good friend, a remarkable want of worldly wisdom. If I were to do that, the ends of justice would be defeated in almost every instance. My system promptly and very effectually punishes a rascal.

A.—I confess I do not see how.

B.—It is all very simple. In the first place a man who

attempts to bribe another takes every possible care to avoid publicity. To prove an offence of attempt to bribe is most difficult, and one that is rarely convicted. To prosecute for such an attempt has most serious consequences, if it fails, inasmuch as I become notorious. The alleged attempted criminal transaction is pounced upon, and discussed in every possible light, and some of the more unscrupulous newspapers remotely hint that I am playing to the gallery and that things in this world are not always that they seem &c.

A.—But you could prosecute such a paper for libel.

B.—My dear Sir, do you want me to live in a perpetual round of litigation? Apart from the notoriety of the thing, my superiors would not permit it, and above all litigation spells money—and I have no money to throw away.

A.—(Incredulously) I see; so you take the punishment of the culprit upon yourself.

B.—That's so. (cortly).

A.—But then how do you reconcile the acceptance of money for which you make no return but an ill one, with fairness and plain dealing? Again, if you do not explicitly promise to decide the case in the briber's favour, he believes that you will.

B.—His delusion is, my dear friend, no business of mine. If such a man speculates with his money he must be prepared to meet with the results of rash speculation. There again (and B smiled a bland smile) I am doing him a service,

A.—But do you not take under false pretences a sum of money you have no title of right to? And you must be aware that the man gives it to you on an express understanding.

B.—I again say—I decline to be answerable for anyone's self deception. In very many cases there are agents. I rely on no agent. The agent is invariably that of the briber—and when I accept, what you call an illegal gratification—it is on the understanding that should the briber lose his case the money will be returned.

A.—Oh! then you do return the money?

B.—I always return money which is not legally mine.

A.—I don't quite follow you. How can such money be legally yours?

B.—My very moral, Sir, before you run a tilt at bribery, and corruption, it is very necessary that you should give the subject a little more study. In this India of ours we do not blunder like you Englishmen. You must know that in most suits where one party offers a bribe—and that is mostly always—the other party—tries to outbid the first offer.

A.—But how is it known?

B.—Every body concerned in a case knows it. Even the *Vakils*. You see bribery *per se* carries no moral reprobation with it—only when it is looked at by the light of the Penal Code does it wear a criminal aspect.

A.—And, you receive the largest bribe and decide.

B.—I do my friend. I receive both the bribes. But how impatient you are! Let me have my say. I accept both, I say, but I return the money to the man against whom the case goes.

A.—Do you mean to say that, if there were a great disparity between the bribes, it does not influence you on the side of the big bribe?

B.—I give it the utmost consideration but I eventually decide according to Law and Justice.

A.—But to take a supposititious case—say only one man bribed you and rather handsomely?

B.—I should return the money if it went against the briber.

A.—You must not be angry if I say that, that is scarcely possible to a man who confessedly takes bribes.

B.—You can judge only by the standard you possess. It is possibly what you would do. You may object that by my procedure bribe-giving would soon cease. Not so; the man who wins his case always is sure that but for the bribe he would have lost it.

And so on. But it is not necessary to quote any more. There is no doubt that many, in fact the majority of those men who take bribes argue in some such way. "Why, Sir," said a Police Inspector to me who had in ten years time amassed a large amount of money: "I only take money from villains who make a bad use of it. With such money I support a large number of poor relatives. I have built a small *umbelum*—a way-side shelter—where, during the hot weather, I give water to travellers passing by. I have fed a lot of poor people, and I annually give a large amount of money away in charities." "How do you know?" said I "that the money you deprived others of, would not have been turned to better use?" "Those villains Sir! *appañ!* they would never!" and with that emphatic reply I was obliged to remain contented.

There are others again who never talk of bribe-taking. They decline to discuss the ques-

tion on the assumption—which they would have, you believe—that to bribe them is hopeless. These men are worse generally than the others. They never let their left hand know what their right hand does. I was once chatting with a genial Mahomedan Contractor of some wealth and standing, and casually said—"Mr.—is a very strict and honest officer, is he not?" The old contractor's eyes twinkled humourously. "Oh yes, sir, He's very strict and very honest." I knew there was something behind, and long afterwards I came to find out. The said officer, it would appear was strict in some ways especially with his own subordinates but very lax with regard to contractors. His favorite way of swelling his income was to give his Post Office Bank book—the accumulations used to be removed annually to *Arbuthnot's*—to the contractor, say with fifty rupees. "I don't like to entrust this money" he would say "to the Contractor, to a peon, would you mind handing it over to the Post office and returning the pass book?" The Rupees 50 swelled in this way sometimes to 150 or 250—and no one was the wiser—and the official gentleman, with the quiet manner and honest reputation, could conscientiously declare he never received any money. He was not aware how the increase came. He keeps no strict account of his deposits—&c., &c. But the stories of stultifying the conscience, of evading the difficulty of being honest by some subterfuge of words, or action, are innumerable.

The question of corruption is a large one, and, as I said before, where the people are corrupt, it is impossible to keep low-paid subordinates from succumbing to the temptation of bribe receiving. The only cure is *thoroughness*—and the cultivation of a closer communion with the masses. Thoroughness in investigating personally, all cases of alleged oppression, extortion and bribery; thoroughness in the superior officers, not leaving the execution of their duties to their subordinates—thoroughness in impressing the people, with the idea that the Executive officers

have their (the peoples') best interest at heart. And this can be done only by European and native officials of all ranks following out more closely and strenuously the example of Lord Amptill by personally interviewing the people. No petitioner should be too humble, no trouble too great to enable the executive officers to get at the root of things. There is too much stand-offishness and Bahadurism, even among Native officials when dealing with ryots and poor people. Easy and untrammelled accessibility to rich and poor, to the influential and the oppressed would soon do away with bribery—for there would be no need to bribe the arrogant underlying, and even if bribed, the District officials would soon hear of it. One of the most certain things in Indian administration is that, as regards bribes and bribe-taking the voice of the people is as true as the voice of God. If an official is a confirmed bribe-taker the fact is never concealed long. Every one for a number of miles round knows. The Vakils in the Court know it; the Police constables know it. In short it is knowledge which is public property and administrative and controlling officers, if they went among the people more, would soon come to know it too. Ill-will, malice and lying, may sometimes be responsible for locally blasting an officer's reputation, but it is only for a time; the people soon come to sift the truth, and will tell you unerringly what the facts really are. The Government of India is credited with employing a secret service corps. That body would be superfluous if the responsible executive officers could be got to mix with the people more freely, constantly, and unbendingly than is now the case. All fears regarding loss of prestige and respect may be set at rest. Average Hindu ryots and artisans—the Hindu people as a whole are law-abiding and courteous,—are to a degree, mindful of official ceremonials and observances, and sticklers for etiquette in rendering to Caesar the things that belong to Caesar. And it need not be apprehended that any advantage will be taken of kindness and interest evinced in them or in their behalf. If an executive or controlling officer really had a proper conception of his duties and carried them out, he would, in a very short period of time, be able to differentiate the black, from the white sheep in his care. That once known, the weeding-out process should not be delayed.

ed. As said before, false and lying stories there will be in plenty, but the effectual cure for them is the personal and intimate knowledge of the people. Gain their confidence, and lying tales are easily and unerringly tested. In this way only can corruption be coped with. The people should learn that short shrift follows on the heels of discovery. They should be brought to learn that bribing any one is of no avail.

Bribery again, is the cause of ignorance of the law. Officers on *jumabandy*, and on circuit should seize every opportunity of explaining to the people the intentions of the Government in regard to the Forest, Salt and other legislative measures which the people now look upon with detestation. It has often occurred to me that an immense amount of good would result if a legal catechism could be produced by somebody as a primer for use in village schools. The catechism should make clear the beneficial results of British rule, and the necessity of legislation generally, and the righteous intentions of the Government in regard to particular or local laws. In this way Sanitation, Vaccination, Forest administration, etc., could be brought home to the masses of the populace. That the Vernaculars should be the medium of communication goes without saying, and the primers should be free of technicalities, and couched in language "understood" of the people. It must be remembered that education has as yet barely touched the fringe of the population of India, and that the ignorance of the people about the most ordinary legal measures is appalling. Arm the people with a knowledge of the exact powers and responsibilities of officials, and the knowledge of the consequences that follow dereliction of duty; and half the battle is won. Bribery has existed from time immemorial, and will doubtless exist till human nature is no more. There is, however, bribery and bribery, the one is an occasional aberration from the path of duty and honor, the other a daily scourge eating into the vitals of the people, prostituting justice and vitiating every just, generous and statesman-like intention. This is what should be put down with an iron hand, and the only way to do so is to educate the people against it. But all this requires patience, love of the people and patriotism, and let it not be said that India's sons are lacking in this respect. Europeans in the Services can do but little, but Indian officials of culture and education have grand opportunities of doing much and to them is this concluding appeal more especially addressed.

A. P. SMITH.

THE RACIAL QUESTION IN INDIAN POLITICS.

THIS opens out a large question, but none the less important and interesting as it affects the well-being and progress of the Indian population taken as a whole. However much we may deplore it, there can be no doubt that this racial question crops up in a variety of ways, and with a variety of classes, from some of whom we could hardly have expected it. We may take it that broadly speaking there are four communities to be reckoned with in India, three of whom differ from each other in religion, and all of whom have such diversities in their political aspirations, social customs and mode of living, that one is led to think their interests must be conflicting so that what is sought for by one is decried by another or treated with indifference by the third. And underlying all this there is of course the racial jealousy which ignoring all considerations of individual advantage or common welfare, insidiously creeps in to retard the national progress. Having regard to their number, the Hindoos, stand first, and between them and the Mahomedans who come next there is as great a gap as there is between the latter and the Indian Christians who rank third; and last of all come the Eurasians, who are none the less Indians because some of them repudiate their connexion with the land of their birth and domicile.

What is meant by a Hindu it is not easy to define. Taken in its literal sense, the term refers to all those living in Hind or Hindustan, and as such would include Mahomedans and Christians and even Eurasians. Nor do we fare better if we restrict it to one particular race, for if it be the Aryan, we may perhaps search in vain for a pure Aryan in India, and even if the Brahmin and the Kshatriya be taken as its present representatives, they form but a fractional minority of those who in the ordinary acceptation of the term are included amongst Hindoos. We would find confusion worse con-

founded if we take religion as the test; for, a deist, an agnostic or atheist considers himself just as much a Hindoo, does as a follower of Brahma or Siva, and so do the depressed classes of the South, whose real cult is demonology, but who in a perfunctory way bow down to the Gods and Godesses of the Brahmins. The only solution available, for my purpose at least, is to include amongst Hindoos all those who keep caste, from the Brahmin down to the pariah, who low as he is, will neither dine with, nor will intermarry with a class of persons he considers lower than himself, who eat horse-flesh and dogs and rats and dead bodies of animals. For though the Jains who are scattered all over India, are in the census enumerated as a separate community, having repudiated the authority of the Vedas, and the ministry of a separate sacerdotal class, yet caste is maintained by them, and so is it by the sikhs who are to be found extensively in the Punjab, and came into prominence more as a political power than a religious sect. They reject the Vedas but have not absolutely discarded the Brahmanic ritual, and employ that class in ceremonial occasions, and indeed the chief distinguishing characteristic about them are that they eschew tobacco and never cut the hair on the head or face. And it is no doubt true that for centuries the depressed classes of the South have been kept in domination by the caste-Hindoos, who will avoid any close contact with them, or will prevent them from drinking water from their wells or entering their villages, yet these are but social distinctions that are bound to wear out in course of time. For, however great be the antipathy of what is called the caste-Hindoo against the non-caste Hindoos, in these progressive times and under a Government which is no respecter of persons, and which offers education to all classes and creeds alike, and when the railway is penetrating to remote nooks and corners, and bringing the high born and the low born to rub shoulders together, there is a levelling tendency at work in the one case, and an elevating tendency in the other case, which

will result in the long run in overthrowing the barriers which at present keep people aloof from each other. In North India there is no pariah question that needs to be solved, for each class occupies its own position and performs the duties pertaining to it and there is nothing to hinder any person from relinquishing his hereditary occupation for something that is higher or lower in degree. I have come across Brahmin cultivators, and seen them driving carts or plying a boat, and a most successful tannery and manufactory of boots and shoes was owned and managed by members of the priestly class, whilst persons of a low caste are holding responsible positions under Government. The depressed classes in the south unless they are admitted into the Hindoo community will seek relief from their present degradation by becoming either Christians or Mahomedans, as many have already done, or will obtain emancipation by the indirect aid of the Brahman. For when one of this class, whom the pariah dared not approach within a certain distance comes and quietly sits by his side in a railway carriage, he imparts an object lesson, which is not likely to be lost and will incite the man hitherto kept in subjection to seek for other privileges which have been denied him. By a submissive resignation to his fate the pariah has offered the greatest obstruction to his emancipation, but once he realises that his position is susceptible of improvement, he will take to other occupations, and constitute an important factor in obliterating the present landmarks of Hindoo polity.

In the Mahomedans of India we have a community which though made up of heterogeneous elements is at least compact, and capable of being easily distinguished, as one composed of men who are the followers of the Prophet of Arabia. They are to be found all over the country and constitute one-fifth of the total population. In the South their number is very limited, the trading class of Labbe on the east coast and the semi-trading and semi-agricultural Mappilla on the west

forming a substantial portion of the community. These both are of Dravidian origin who at various times adopted the Moslem faith, and considerable accessions are still being made by conversions from the depressed classes. In the Bombay Presidency only 8 per cent. of the inhabitants are Mahomedans and are chiefly made up of converts, the Khojas and Menons who form a most important trading community being up to this day governed by the Hindoo law of inheritance. The number of Mussalmans of pure foreign blood in the south is very small, the bulk of them having been drawn from the same race as the Hindus, and the next especially along the west coast being of mixed Arab and Indian blood. In East Bengal and Sind we find more than half the population professing the Moslem faith, but in both, the bulk of the community is composed of converts, though in the latter there is a considerable foreign element from across the frontier. In the North Western Provinces and especially in the Punjab there is a large contingent of Mahomedans of a foreign race, but here again the Hindoos contribute a substantial share. Thus if we were to exclude the converts from Hinduism and persons of mixed descent, it is doubtful if more than 1 per cent. of those professing the Mahomedan faith can claim to be of foreign blood. Coming to the Christian community we find that in the Eurasians we have a large admixture of foreign blood, though as regards the bulk of them it may safely be asserted that taking colour as a test they seem to approximate more to the Indian progenitor, than the foreigner, and indeed of a certain proportion of them it may be said that but for the dress and the name they bear, it would be difficult to distinguish them from the pure inhabitants of the country. Their number though small is on the increase, and as a community they will have to be reckoned with. As to the Indian Christians, though they have embraced a faith brought to them by foreigners they lay no claim to the possession of any foreign blood, except in the case of some Syrian Christians who, even if at any

time they had any, have after a lapse of centuries lost all trace of it.

It is therefore evident that much as we hear of this race question, when we come to examine it minutely, it is by no means possible, with any approach to accuracy, to state from what race a community is descended. The Hindus are a mixture of Aryans and Dravidians and even in some instances the aborigines have been taken into their fold, whilst amongst the Mahomedans and Christians still greater confusion is caused by the addition of the Mongolian element. There may be here and there bodies of men who claim to be of pure Aryan birth, but there is no pretension put forward on their part that the fate of the Hindoo community should be determined according to what they consider is conducive to their welfare. And as for the pure Mongolian, he is such a rarity that he may be left out of account altogether. We have in the north a fairly large number of the descendants of the court and armies of the Mussalman dynasties, who ruled over India and whose ancestors were foreigners, but most of them intermarried in this country, and all of them have so adapted themselves to their surroundings, that in food, dress and mode of living there is no difference between them and the converts from Hinduism. As to the aboriginal races they are gradually being absorbed by either the Hindoo, Mahomedan or Christian communities, so that in course of time religion will remain the only distinguishing landmark, and the distinction of race will lose even the little significance it possesses now.

That there will ever be a complete fusion of the divergent elements which compose Indian society, is but a remote contingency. The religious problem in India is not easy of solution, for though Christianity is making rapid strides, its latest accessions are from classes which are outside the pale of any of the recognised forms of faith, which for their own part supply converts on a very limited scale. Its followers number one per cent. of the

total population, so that a considerable time will elapse before it can even at the present rate of progression be considered one of the principal religions of India. And as to Hinduism and Mahomedanism neither of them show any indication of being able to absorb the other, so that any consideration of the future may safely take for granted the existence side by side of the three great religions in India. Though the time when there will be a free and unrestrained intercourse between the various communities is very distant, yet an appreciable advance is being made in this direction especially in north India, where the predominance of any one class over another is absolutely unknown. The number of those who consider there is no harm in sitting down to quiet meal with a friend, never mind who he is, or of partaking of food that is not sanctioned by orthodoxy is rapidly increasing, and as may be expected is a source of promoting good will and kindly feeling between persons whose social relations to each other would otherwise have been of a purely formal nature. And indeed all over India what with the effects of education, the facilities of communication, and the struggle for existence, there is a disintegrating process which will bring the people together by breaking down the barriers which at present keep them apart. But when we come to consider the relations of the people as a body politic, we are cheered with the prospect of a fusion if not immediate, at least at no distant date. The Hindoo, the Christian, and the Mahomedan are equally interested in the progress of the country and each one of them would suffer equally if this progress were retarded. Under a foreign Government, whose laws affect the rich and the poor alike, and which professes to make no distinction between castes and creeds, there can be no possibility of a collision of interests; what is good for one, must of equal necessity be good for the others, and anything that injures one class is sure to have a similar effect on all. A reduction of the salt tax will benefit all communities alike, and if the Income Tax be

increased, it cannot affect one class more than another. The elaborate system of artificial canals in the south supplies water not to the Hindoo only, but also to the Christian and the Moslem, and when the Government offers certain appointments to be competed for, it gives full scope for members of every faith and every race to try to secure these prizes.

And here for the first time we notice a rift in the lute. There are certain communities which protest against a policy which would mete out to all a fair and impartial treatment, for they say unblushingly "we want exceptional treatment, we are a backward people, our education has been neglected, and our qualifications are indifferent," so each of these claim the benefit of a favoured nation clause. Strange though it may seem, it is not very many years ago that the Government of the day considered there was nothing improper or unfair in making a particular class of persons, the recipients of all their favours. All over India exceptional treatment was accorded to the Mahomedan and especially so in the North Western Provinces. In the face of it the policy was one of dubious morality, but there was a heavy stake to be played for. A political organisation had sprung up which claimed to be national, and which it was hoped would soon be extinguished if an important community like the Mahomedan could be detached from it. If there is now a change of policy, we may generously credit it, not to a frustration of these hopes, but to a perception of the error that was being committed and that in Lord Curzon we have a ruler who has set for himself a lofty ideal, to govern justly, wisely and well. He has in clear and unhesitating terms announced that his policy is to be one of "a fair field and no favour" to any individual, and that the fact of a community being backward constitutes no claim for exceptional treatment. If a backward condition constitutes a valid reason for special consideration, I would plead it in favour of the depressed classes who have a great need to be uplifted from their

present degraded condition, but as to those communities who are eager to impress upon Lord Curzon the necessity of an exceptional treatment, it is to be hoped that they will now recognise how indispensable it is on their part to arm themselves for the struggle for existence that is being carried on everywhere. The remedy is in their own hands, and there is nothing to hinder them from utilising it. I fail to see what special advantages can be placed to the credit of the Hindoo. Taking the community as a whole it cannot be said that its material condition is different from that of other communities, for it is not easy to surpass the depths of poverty reached by some of its members. The bulk of the Mahomedans are of the same race as the Hindus, their surroundings are the same, their food is more nutritious, they marry later in life and do not impoverish themselves in a lavish expenditure in weddings and funerals, which are all points in their favour. True, they are somewhat backward in English education, for which, at its start, they had an unreasoning prejudice, but happily they have been brought to a better frame of mind, so that now there is absolutely no reason why they should not compete on equal terms with any other community. They have learnt the advantages of self-reliance and self-exertion, and it is a significant fact that when the Viceroy visited Alligurh the last time he was met with a disclaimer, that anything was to be asked from him by way of favour or concession, but that merit was to be made the basis of their prayer. This will account for a change in the current of Mahomedan opinion which is now bent on giving up a policy of isolation and political inactivity, whilst some ardent minds would go further and make common cause with the Hindoos.

It is difficult to speak of the Indian Christians as a whole, because of the difference both in the origin and present status of those living in the different provinces. In the Madras Presidency where Christianity has prevailed for centuries the converts were drawn from the poorest and the

lowest castes, and have hence found it difficult to get over their depressing antecedents. Education is at a low ebb, and the caste system they maintain, keeps them from rising in the social scale, especially as they have to contend against a community which for centuries held them under domination, and whose pride, exclusiveness and orthodoxy finds no parallel in any other part of India. These are considerations which contribute towards keeping the two communities apart, but the Christians, though heavily handicapped are coming forward rapidly as is apparent from the latest educational statistics, and if only they could be prevailed upon to give up caste, they will constitute a factor which even the Brahmin will have to reckon with. In Bengal the earliest converts came from the educated classes, who came from the highest castes, and they have not only been able to retain their social position but have indirectly raised the status of those who were not so circumstanced by freely associating with and even intermarrying with them. Thus it is we find that their relations with non-Christians are not only friendly, but often most cordial. In Punjab a like feeling may be noticed, though the North Western Province has something in common with Madras in that the bulk of the converts are drawn from the depressed classes or are the descendants of famine orphans taken over by the Missionaries. Here again the relations between the Christians and the other communities are somewhat strained due entirely to social considerations, but as caste is unknown amongst them, their identity is soon lost, and if any individual were to claim to be descended from a high caste, it would be difficult to contradict him.

The attitude of the Christians, towards the professors of another faith in matters political, is as may be expected, controlled to a great extent by their social relations. In South India where they constitute a large and important community, this is a question of vital importance, and no alternatives are open to them, either to constitute themselves into a separate community, with all their

energies devoted to their exclusive advancement, or to join hands with the others to promote the common welfare. In the one case they would have to fight against fearful odds, and would have to bear the brunt of the latent and active hostility of the rest of the population, whilst the reply of the Viceroy to their address should convince them that there is but little prospect of their receiving exceptional treatment at the hands of Government; but above all, notwithstanding the very laudable efforts of some zealous and patriotic individuals to unite as far as possible the discordant elements, the mass of the community is so deplorably split up into various sections dominated by caste, that it is absolutely hopeless to bring them together, unless it be in the company of non-Christians. I say this from most painful personal experience, and efforts to gloss it over, help only to perpetuate the evil. Amongst Hindus I have heard of the existence of sectional differences, arising from one cause or another but the aversion displayed by a Shanar-Christian towards a brother Pariah is only equalled by the scorn and contempt he himself receives at the hands of a Vellala, whom a perverse fate sometimes compels to rub shoulders in a place of worship with those whose only merit consists in that they lay claim to having been derived from a common Dravidian stock. From a community so disjointed, but little can be expected in the furtherance of even its own advancement. That other communities sometimes treat with aversion and often look down upon a Christian is a lamentable fact, but this is a feeling of a very ancient date due to a variety of causes, and will in course of time wear out, for, the more the educated Christian comes into contact with them, the greater likelihood is there of the breach being filled up. Social intercourse under existing circumstances is impossible, it is only public questions that both are interested in that can bring them together. And there is no reason to believe that Indian Christians are wanting in patriotism or are indifferent to the fate of their country. If a somewhat

hesitating attitude is adopted whether in Madras or else where it is perhaps due to the mistaken belief that as a small minority, they are likely to be outvoted or at any rate their opportunities for achieving anything practical would be limited. A small but powerful minority sometimes shapes the policy of the whole body or at all events exercises an appreciable influence on its deliberations. Though the number of Indian Christians who actively interest themselves in the National Congress is small, yet every deference is paid to them, and so far as I am aware, nothing has ever been done to hurt their susceptibilities. Even if any community honestly believed that by abstaining from joining the others it would further its own interests, it would be a selfish policy and demoralising in the long run to sacrifice or be indifferent to the interests of the nation for a sectional advantage, but recent events have shattered the hopes of a good many who were of this way of thinking, and the future I believe will see the rallying of most of those forces that were once scattered.

Of the various units which compose Indian society, the predicament of the Eurasian is the most pitiful. He no doubt possesses some foreign blood in him, but he often ignores the fact that some of it, and may be the major part of it is Indian. He is proud of the one, and ashamed of the other. He labours under the delusion that his interests are identical with the ruling race, who are here to-day, and back to their own country to-morrow, but where is he to go to? He would like to eat the food, wear the dress, and live in all respects the life of an Englishman and rushes into debt to enable him to do so. He considers it beneath his dignity to mix with the Indian, or to send his sons to a school to rub shoulders with boys who are only natives of the country. He has a distaste for Indian languages and thereby disqualifies himself for holding many lucrative positions, where he is indispensable. He has a laudable desire to rise in the social scale but no sooner has he attained the object, than he cut himself adrift from the other members of the

community, even to the extent of isolating himself from his own kith and kin. He would like to identify himself with the Anglo-Indians, but receive the cold shoulder. He would scorn to join the Indian, who again is by no means eager to have him. He is absolutely wanting in patriotism, for his knowledge of, and interest in a foreign country is of a very shadowy kind, and as to the land of his birth and domicile, and where his children will have to be provided for his acquaintance with and interest in are still more limited. In many instances he has inherited the vices of both communities and the virtues of neither. Discarded by the Anglo-Indian, shunned by the Indian, treated with disdain by his own people with a Government which has declined to give him any exceptional privileges—his lot is indeed an unhappy one. What is to become of the Eurasian is a problem that even a statesman like Lord Curzon cannot find it easy to solve. No outside help will be of any avail, the redemption of his community rests with himself. He must recognise the bitter truth that he is a native of India, that his own prosperity is dependant on the prosperity of this country, and that he has nothing, to be ashamed of in his origin. He is just as much a native of India as an American of America, a Canadian of Canada, and an Australian of Australia, though their progenitors were all from England. With all these the interests of their land of adoption claim precedence, and should they conflict with that of England, the latter must give way. Once the Eurasians recognise this truth and act upon it, they will find there is nothing to be ashamed of in their origin. They will win the respect of both Britons and Indians, will be able to arrange their domestic and social affairs as to contribute to their personal and family advancement, and they will add to the general prosperity of the country by co-operating with other communities to promote the welfare of the land they live in. The Eurasians of Madras had a dim perception of these facts when they refused to be identified with the Imperial Anglo-Indian Association of Calcutta. It is to be hoped they will not allow any paltry prejudices of race, to stand in the way of their seeking a solution of their difficulties.

ALFRED NUNDY.

THAYUMANA SWAMY—THE TAMIL DIVINE.

IN the level plains of South India, in village town or hamlet some tottering old man with eyes that could but dim perceive the nails on his finger ends, with a bamboo stick in one hand and a black bowl in the other and a tiny boy beside him could be seen begging for a handful of rice, if it be morning, or of the cooked remains of the household if it be night. But his medium of beggary is a song which he sings in broken voice and faltering tune although the expression on his ash-be-smear'd face clearly shows how deep the words have sunk in his heart. Now and then the sundry 'bazaarman' or the cloth 'merchant' as he is with greater dignity styled, will be found reciting when business is at stand still the same flowing verse in a way now languid, now vivacious. And should one enter a marriage *Pandal* decorated in a manner that shows at one glance the variety of foreign influences that have been brought to bear on the land even in parts nestled away in Indian remoteness, here also in the *Pandal*, to the accompaniment of excellent music the same matchless marches of Thayumana Swamy will be heard. Or, would one go in the mid-day sun to the tankbund* of the place which, amidst the thick set cocoa palms, seems to transport you in a moment away from the tropic heat and sweating air, there also, on a thin cloth spread on the ground might be seen some man lying and singing away to the genius of the spot as it were, the self same tune. And could one observe the lonely traveller trying to do his distance ere the night fall, in the breathless calm of an Indian evening with the shuffling clouds overhead and the shrubs and stalks of corn or else the bare bosomed marshy tract all around, the loud voiced song he is pouring out to the sacred brotherhood is no other than one of the same Thayumanavar's songs. What then is the charm of these songs which seem to rule the street, the grove, and the wilderness and seem to be a solace in solitude,

a joy when all is joyous and a vehicle of human sympathy? No deeds of heroic valour, no tales of love, no recital of sanctified superstition, no bigoted praise of sect or creed thus lays hold of the heart. We shall soon see what it is, knowing first when, where and how the author of these songs lived.

Nor does it take long to relate the story of his life. It seems strange, very strange that the Hindu who with passionate devotion attaches himself to the works of the great men of his land, reads, recites, sings, and discusses them with unsurpassed fervour and seems almost to live a bondman in their presence, it is certainly strange that such as he, entertains culpable indifference to the authentic facts of the career of these great men. He seems to deny with vehemence that the dross of life has anything to do with the minted gold of life's work. He always seems to act on the maxim that in man there is nothing greater than mind; and treasuring up with unequalled zeal the immortal outcome of a man's career he all but despises the rest. Carlyle had to put the question and could only answer for himself when he cries out "Shakespeare or the Indian Empire?" No such comparison would ever occur to the Hindu, and to him it is a part of his mental necessity that he must be with his great men. This mental characteristic may be observed even among our youths who are becoming so thoroughly anglicised in their studies. It is not the biographical portion of literature that has any great interest for them but it is the work proper. What then is the explanation for this mental phenomenon? It lies in their intense religious nature which with an utter disregard for the transient cares only for the eternal and the immortal. The Hindu seems to say, "wealth, joy, sorrow, accident, fortune, cannot absorb me; why then another's simply because he is great? By all means I shall preserve what has made him great." Of course we regret such a sentiment should have so supremely prevailed but we cannot quarrel with it. It is stifling logic, but logic still.

As reliable tradition has it, Thayumanavar's age

is somewhere at the beginning of the 18th century. At *Vedaranyam* which translated means Vedic forest a place of pilgrimage in the District of Tanjore, our author's father seems to have spent his early days in managing the highly esteemed *Siva* temple of the place. He was a *Vellallan* by caste, i.e., an agriculturist, the word *Velanmai* signifying agriculture. Among the many non-Brahmanical castes of Southern India, that of *Vellallans* is acknowledged by highly respected, religious and more than all cultured. The cream contribution to Dravidian civilisation seems to have been theirs. At that time Trichinopoly was under the rule of the Nayak kings and Vijaya Raghunatha Chokkalinga Nayakar was the reigning monarch. He, hearing of the attainments of Thayumanavar's father in the important branch of accounts got him from his place at Vedaranyam to preside over that department of the administration. Thayumanavar was the second of his two sons, born after the first was given away in adoption by the father to his brother and named after the God by Whose especial grace he was believed to have been born at the earnest prayer of the father for a child, since he had given away his only son in adoption. After the demise of the father, Thayumanavar was raised by the king to the position of his father in the state—although he had from boyhood developed a turn for devotion, prayer, asceticism and pilgrimage. Withal he served the state for some time when the Nayak coming to know of the innate greatness of his favourite servant released him from the bonds of service enabling him to carry on the studies that had possessed his heart from so early an age. After the death of his royal patron, Thayumanavar was placed in a situation from which he could escape only by leaving the state. The wife of Chokalinga Nayak set her heart on securing the affections of Thayumanavar and signified to him that she and her state shall be governed by him. Thayumanavar with a dexterity that might not have been expected of him overreached the passionate queen by finding himself out of her territory in the shortest

time. He subsequently married at the earnest entreaty of his brother and shortly after he was presented with a son by his wife renounced the world, entered the order of *Sanyasins*, lived the rest of his days in visiting holy shrines and composing his immortal songs, songs which the Tamil world can no more forego than forego itself.

And what is the subject of these songs? In one word—INFINITY. That peculiar faculty of the Hindu mind to be in the presence of the Infinite, to feel its powers, to realise its grandeur, to be agonised by its mystery, to be possessed by its beauty, to feel forsaken by its awful silence, to be exhilarated to madness by its mute all powerful variety, to revel in its all embracing nature, in fact, to be subject to all possible emotions, just as the strings of a perfect instrument are to all the possible combinations of force, delicacy and movement, this faculty has been the ideally developed faculty of the Hindu. And in Thayumanavar it seems to have found its perfection. To take the non-Tamil knowing reader along with us and lead him to at least a faint appreciation of these songs we cannot do better than turn to some of the British poets. We shall first put a question. How poor would Wordsworth have been if he had not written the Ode to Immortality? No doubt without it he would have found his name in the scroll of the Immortals; but all the same there is no denying that the brightest stream of light that plays on that crown of immortality would not have been and both the poet and the English knowing world would have been sadly, sadly poorer for it. It is that which makes Wordsworth more than a poet—a mighty prophet, a seer blest; that endues him with more than poetic feeling,—with divine afflatus. Take again Shelley who was at once Nature's child and a banished angel on earth, who seemed to have been born with no self of his own and tried to borrow that of the universe, who was not so much a poet as a sweet lyrical note in himself and whose poems lagged behind himself; how many pages of his poetry could not be quietly

sacrificed for that small hymn, Hymn To Intellect: what Beauty? And where in the whole realm of English Literature is anything to match these two poems which take the mind beyond the region of poetry to perceive glimpses of the shadow of the Infinite? But when we turn to Thayumanavar, there is nothing else except the songs of a soul confronted by the Infinite; and what wonder then that he rules the heart, transports the mind, lays hold of the soul, and takes the whole being captive! To malady of thought he combines the melody of sound, and singing of the struggles and sorrows of the mind, chastens the soul and leaves it in rapture. And during all this while, be it remembered, he carries us on the wings of poesy, unfatigued, fresh, eager until at last we come to that ecstacy in which sorrow is joy and joy sorrow, when we feel all but absorbed in the universe. And what is the fountain source of this poetry which is so full and resonant, so sad and yet so full of throbbing life in every accent, so sweet and yet so chastening; which braces up as prayer, comforts as confession, soothes as song, raises to sublimity as high presence? What is it that in reciting Thayumanavar one feels as though he has prayed, confessed, been soothed and become sublime all at once? What is this literature? Is it of the mind or of the soul? Is it simply the poetry of metaphysics, something of Shelley and Wordsworth, a glimmering perception of something of the shadow of the Infinite? It is much more than that; it is the poetry of the *soul* that *shall be* from bondage free, that must its emancipation obtain. It is here that the fountain spring of the poet lies and in its grandeur it is as great as grappling with destiny. The Prometheus of Shelley asserts his might against the "Almighty but for one"; but Thayumanavar's combat is against the inherent evil in man, the mystery that shrouds him and teases him out of thought, the vanities and weaknesses of the flesh, the absolutely unavailing efforts of the mind, the curse that has lighted on humanity. They are in fact songs that serenely

spread themselves in the heavens, but having their source in a surging, stormy, raging, tempestuous ocean below. It is the music that emanates from a bosom heaving and swelling with sighs. They are the abiding sorrows of a soul to which perfection is denied. Hence the deep pathos that tragedy alone can impart, but more than the sweetness of this tragic note there is something that purifies, ennobles and bids the soul to hope and be saved. It is the implicit faith in the absolute goodness of the Infinite—not that everything has been ordered for good, but that there is a goodness with whose grace evil may be conquered, and the stifling imperfections of mankind overcome. Is man made so wretched and miserable, without a hope without a mercy, without a blessing?—although it is for him to merit it and be saved. It is this faith that distinguishes Thayumanavar's poetry from the poetry of mere revolt, as its deep pathos distinguishes it from the poetry of mere adoration. It is human in every fibre, realistic in every conception, tragic in effort, sublime in aim, and fervent in faith. It is in fine, the poetry both of revolt and of faith—revolt against the crippled, feeble and failing manhood, and faith in Infinite knowledge capable of rescuing man from eternal darkness and misery. And placing himself in various moods the poet pours forth in rich and stately strains the sufferings of a soul that at once revolts and seeks redemption. It is not the overthrow of a higher power, but the overthrow of evil with the help of good that possesses the poet—of evil under which he suffers and of good in which he has absolute faith. But the energy with which the poet tries to throw off the yoke and the fervour with which he pleads for redemption raise him to the grandeur of saintliness in the region of poetry. But being against Evil, he seems to fight with Good for His grace, benediction and blessing—a spirit that sustains the interest of the work throughout, while all else is so touching, true and transcendental.

But, should the reader have thought from what we have said that Thayumanavar has any solution

on his own to offer with regard to the riddle of this Universe, he would be sadly disappointed. He is no dogmatist, he is no theorist, he is no disputant. In fact he scouts at the pretensions and pedantry of these. In one place he finely says, "O blessed are the ignorant, blessed are the ignorant; for what is the way of these learned? Is it not that of springing from one position to another until they are able to scare away everything, conquering nothing?" Equally unsparing is he against those who confound the capacity to perform, juggler-like, the feats of Yoga with possession of the great eternal truth. "Tiger-like they may hiss and hold the breath and stare with red-hot glowing eyes, but really do they know You—You who play through all the conflicting faiths?" Nor can he, with a nature that tingles with deep distressful agony in every nerve for the unavailing vanity, weakness and vice of human nature, come to persuade himself in the opiate belief that man is God and all is bliss. To him the cheap doctrine "love not, hate not" is thoroughly insupportable. He says with a pathos that cannot fail to touch the saint and the reprobate alike, after enumerating several of the human failings, "O Lord, I confess I am *thy* slave, but am I a slave to these vices as well?" In another place, "Is it possible ever to create a heart as will not yield to divine grace?" And again, "Is it for a mother, O Lord, to abandon her child, because it is naughty?"

To him nothing possesses so absolute and ineffable a charm as complete passivity—the passivity of a living statue, and again and again this victory over desire is the only victory he would ask for in this life. And what does he worship? It is usual with Hindu authors to seek the blessings of the Gods they worship when beginning their works. And Thayumanavar is no exception. But his invocation is one that will let in a flood of faith and light at once in church, mosque and temple alike, and sung bereft of all religious associations under the overhanging skies, has an innate uplifting power of its own. He invokes the great Being that has been

the God of countless contending religions and whom the poet bearing in mind in the conception of silence lifts up his mind in prayerful contemplation. But, from the first stanza of invocation to the last, he does not dogmatise, he does not pretend to teach, he does not elaborate theories and systematise doctrines. He is concerned with his own faults and failings, hopes, prayers and entreaties. And it is because all these find so spontaneous a response in the human mind that we stand by the saint as by a saviour, and come to feel that the poet-saint seeks salvation not for himself, but for human nature.

His own sanctity may inspire in us reverence and call forth our veneration, but it is more than veneration that we feel for Thayumanavar. His scholarship may draw forth admiration from us, but this admiration is nothing and is nowhere in the presence of the whole feeling that possesses us. His philosophical insight may create in us a feeling of rare profundity, but we scarcely perceive it in the rolling tide that sweeps into our inner nature. His eloquence and emotion, his fervour and faith, may carry us on the wings of poesy, but it is not the delirium of poetry alone that we experience. We have all these and something more. It is the sense of bliss born of the fulness of suffering, the relief begotten of flowing tears, the supreme calm achieved after intense agitation, the faith that such struggle cannot go without salvation. We are by the side of a suffering soul; and what except suffering gives mankind a saviour? As the fervour of the poet and the sublimity of the divine uplift us higher and higher, the perception of suffering reveals itself to us, and the feeling comes over us that we are in the presence of a *saviour* who is above the saint, the poet and the philosopher. And this, Thayumanavar achieves by being essentially, deeply, divinely, *human*.

K. VYASA RAO.

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MEMOIRS OF MAHARAJA NUBKISSEN
BAHADUR.*

"The English habit is never to recognise the individuality of the native but always to merge him in some Englishman or other. The Englishman, by virtue of his position in India, is always the superior officer; some subordinate may not only be his right hand, but his brain; but his authority takes precedence of ability, the subordinate is sunk in the superior and though a resolution in a Gazette may bestow compliments on a few fortunate natives, the writers of the more elaborate official documents or books of history do not seem to think it worth their while to disfigure their pages by native names. The history of India as written by Englishmen—and no others care to write it—is a history of English soldiers and English rulers. Which history of India during the Mutinies mentions Hurrish Chunder Mookerjee, and yet who could be more fitly called the right hand of Lord Canning at the time?"

In these few words Mr. Ghose sets forth the purpose of his biography. In the latter part of the eighteenth century when the English in Bengal were threatened, with extinction by the Nawab Suraj-ud-Dowlah, Nubkissen proved of great use to the English. Mr. Ghose refers at length to the nature of the eminent services rendered to the East India Company by Nubkissen and he laments that not one history of India which recounts the glories of Clive and Hastings contains any mention of Nubkissen "who was the friend, philosopher and guide of the hero of Plassey and to whom the English are indebted for services which can scarcely be repaid." The rise and career of Nubkissen is synchronous with the development of the East India Company in India, and while Nubkissen built a name and fortune for himself he materially helped the English in

laying the foundations of their empire in India. The story of this Bengali's birth and career is briefly told. Born about the year 1732, receiving a little education in English and acquainting himself with Persian, he was lucky enough to be selected Persian Tutor to Warren Hastings at the early age of eighteen. From this he soon got himself appointed *Moonshie* to the East India Company, an office which gave him great influence and position. He was taken into confidence both by Clive and Hastings and was entrusted with the translation of several secret documents and communications which passed between the English and the native merchants and rulers of Bengal. In those days when the ruler of Bengal was a Mussalman and when his court was rife with plots and intrigues in which the East India Company had to somehow or other interest itself, they wanted a confidant who would not betray them. A Hindu informant was certainly more suitable for their purpose than an interested Mahomedan. Nubkissen proved himself the man most eminently fit for the task and an early opportunity soon presented itself. A wealthy Hindu who was a subject of the Nawab Suraj-ud-Dowlah fled to the British for protection. The Nawab demanded his surrender. The English refused and their refusal led to a sudden invasion of the British by the Nawab. The English Governor, Mr. Drake, fled from Calcutta down the river Hoogley to Fulta. The English settlement was captured by the Nawab and all the Englishmen and women and children found there were taken prisoners and thrown into a small dungeon. There was enacted the Black-Hole tragedy. The Nawab having taken Calcutta named it *Alinagar* and appointed one Manick Chunder its Governor. He then returned to Murshidabad. "Mr. Drake and the other members of Council having arrived at Madras, brought Colonel Clive on board one of Admiral Watson's ships, who landed with his force at Fulta within six months and took the forts of Budge-Budge, Tana, Magosa

* Memoirs of Maharaja Nubkissen Bahadur, by N.N. Ghose, Bar-at-Law, Calcutta. K. P. Basu, Grey Street. Price Rs. 5.

and Aligar, defeated the Nabob's army and surprised Raja Manick Chunder, who was then amusing himself at *nautes*. The Raja fled to Murshidabad and the English took possession of Calcutta in January 1757, when Nubkissen waited upon Colonel Clive and resumed his office. When Suraj-ud-Dowlah made preparations for a second attack on Calcutta, he encamped in Amir Chand's garden, now called Halsibag. The English wanted a spy and Colonel Clive deputed Nubkissen and an Engineer to obtain information in regard to the particulars of the Nabob's encampment under the pretence of making proposals of peace and offering presents to the Nabob. They brought with them a detailed account of the situation. Clive marched his forces up to the Nabob's camp at the end of the night and blew up his tent and those of his Sirdars by the first fire from his cannon. The Nabob, however, had already removed to another tent and he remained unhurt. Clive followed his enemy to Plassey, where a decisive battle was fought. This is Mr. Ghose's own version of the part played by his hero Nubkissen in the events which led to the success of the English in the battle of Plassey. Mr. Ghose thinks it scarcely necessary to discuss the moral aspect of Nubkissen's conduct in playing the part of a spy; on the other hand, he says, "Nubkissen may have been for once a spy, but he was never an Ephialtes. His mission was not to betray his masters, but to aid them. His acceptance of the mission was an act of courageous loyalty and not of meanness." We pass on in haste to the events that followed the battle of Plassey and the part played by Nubkissen throughout. Suraj-ud-Dowlah was deposed and as a result of the negotiations carried on by Nubkissen, Mir Jafar was declared Nawab. With the sanction of Colonel Clive, Nubkissen settled the terms of the subahdari agreement with the new Nabob. It is a notorious fact that as a price for his elevation Mir Jafar paid large amounts to the servants of the Company, and, call it reward or whatever you may, Nubkissen had his

own share. In the subsequent deposition of Mir Jafar and the installation of Mir Kasim in his stead Nubkissen took a leading part. Mr. Ghose states that during Lord Clive's second visit to India, Nubkissen materially assisted him in purifying the administration. He also took a leading part in obtaining the *diwani* of Bengal, Behar and Orissa from the old Moghul Emperor, Shah Alam, and in the treaties concluded by the British with Shuj-ud-Dowlah, the Nawab of Oudh, and the Raja of Benares. Nubkissen was a recipient of honours and rewards at the hands of both Shah Alam and the Company. Lord Clive was pleased to get a *firman* or mandate from His Majesty, Shah Alam, granting Nubkissen the dignity of *Munsub Shush Hazari*, 4000 *Sowar* and the title of Maharajah. He was also pleased to bestow upon him a gold medal with a Persian inscription, as a testimonial to all India of the regard which Lord Clive and the Company had for his faithful and honest services. He was appointed "political banyan" of the Honourable Company with a salary of Rs. 200 *per mensem*, and there is no doubt that he was in charge of various responsible positions in the Government and that he enjoyed influence and position.

In 1780 Nubkissen was appointed to the *Sazawalship* of Burdwan. This office gave him the entire control of the revenues of the province, and there the biographer has a good deal to say in praise of his administration though various allegations were made against him. It was, however, the last great office which Nubkissen held. The rest of his life he is said to have devoted to the spiritual and moral welfare of his community.

We pass on now to the most important portion of the book, that wherein Mr. Ghose critically sums up the character of his hero. There is a school which holds Nubkissen to be a traitor who betrayed the best interests of his country into the hands of a foreign power for the sake of power and pelf. Mr. Ghose, on the other hand, admires the character of Nubkissen and credits him with the

spirit of the patriot and the drawbacks of the statesman. After a careful perusal of Mr. Ghose's able and eloquent defence of Nubkissen, we feel unable to agree with him that Nubkissen's conduct was not blameworthy, and it seems to us that Mr. Ghose justifies many drawbacks in Nubkissen's conduct in the light of subsequent events in Indian history. Mr. Ghose wants us to believe that Nubkissen joined and helped the English because he knew it was the only power then which could give his country salvation. The question may naturally be asked, was Nubkissen a statesman of such high order as to have taken a broad survey of the political situation of the period? Was the rule of Suraj-ud-Dowlah so highly oppressive that his subjects really longed to get rid of him? Indian history does not enable us to give an answer to the question in the affirmative. It may be that Suraj-ud-Dowlah was not friendly towards the English; it may be that he tried to intrigue with the French power to drive the British out of Bengal. All this may be a sufficient reason for the English to stand up for their rights and fight with the Nabob. The English had a grievance against the Nabob; but Nubkissen had none. There was certainly no justification for Nubkissen to side with the British and to have throughout busily conspired against his native ruler. If Nubkissen thought that the regime of Suraj-ud-Dowlah was baneful to his people he could easily have obtained the assistance of the Mahratta power to oust him. The fact is, there is no evidence to prove that there was any widespread desire to see Suraj-ud-Dowlah off the *gaddi*. On the other hand, it is clear that he fell a victim to the conspiracy carefully planned by a few of the leading men, chief among them being Mir Jaffir, his commander-in-chief. According to previous arrangement this man was declared Nawab of Bengal (after the battle of Plassey) and one could easily therefore guess his motive for helping the English. In his case it is the old tale of Indian history,—the servant trying

to betray and then usurp the place of his master. The story of Omichund amply justifies the view that the whole plot to overthrow Suraj-ud-Dowlah was the work of a few scheming and selfish people who hoped for great things from the British success; and though Omichund, the miserable Bengali, did not realise his dreams of making a fortune for having sold his master, yet the other conspirators reaped in full all the advantages the opportunity afforded them. Mir Jaffir was declared Nabob and we know very well the subsequent story of Nubkissen. With the same set of facts presented by Mr. Ghose and bearing in mind the exceedingly demoralised condition of society in those times, the anxiety of the English to protect their commercial interests and their natural desire to manage to secure the services of clever natives who would serve their purpose, one could equally legitimately arrive at the conclusion that Nubkissen might have been actuated by personal considerations. We may admire his attachment and devotion to the English who had been very kind to him and had advanced him in life, but many will certainly not be inclined to excuse his treachery and disloyalty to the ruler of his land.

Mr. Ghose misreads Indian history when he says that at the time of which we are speaking the Hindu power was extinct beyond the hope of revival. Mr. Ghose could not have forgotten that the third battle of Panipat which once for all settled whether the Mussulman or the Mahratta was to be the ruler of India was fought in 1761, four years after the battle of Plassey, and that even several years after the third battle of Panipat there was hope that the Mahratta power might one day regain its lost ascendancy.

In his anxiety to white-wash the conduct of his hero, Mr. Ghose makes the astounding assertion that Nubkissen, so far as he helped the consummation, did so out of the same necessity which compelled Englishmen to invite William of Orange to occupy the throne rendered vacant by

the constructive abdication of James II.

No student of English or Indian history can for a moment suggest any point of comparison between the English revolution and the revolution, if one may so call it, which led to the destruction of the power of Suraj-ud-Dowlah. In the events of the English revolution almost the whole of England took a leading part. James II had made himself obnoxious and unreliable; he had threatened the liberties of the people and the constitution. His unconstitutional doings provoked the whole population of England. No such thing can be said of Suraj-ud-Dowlah. Whereas in the case of the English revolution the whole nation took part, in the case of the revolution in Bengal a few conspirators alone took an active part. There was no popular ferment of any kind at all in India at the time as there was in England. Whereas in England the promoters of the revolution were actuated by the most honorable and patriotic motives, the promoters in Bengal were actuated solely by selfish ends. Mir Jafir, the commander-in-chief, was promised the throne of Suraj-ud-Dowlah and the English had to protect their commercial interests. And then again William of Orange was invited by the unanimous voice of the people of England. Surely the people of Bengal did not invite Clive and his company. William of Orange was the son-in-law of James II. But the English bore no relation to the people of Bengal. It is unnecessary to pursue this point further. We can only express our surprise that a scholar of the reputation of Mr. Ghose should display the lamentable weakness of the advocate. There is one more point which calls for a few observations. Mr. Ghose writes as if the English who fought at Plassey fought for empire and dominion in India. This statement is not at all warranted by Indian history. From the very beginning, the Court of Directors were warning their servants in India not to seek for dominion, but to concern themselves only with their commerce. If they fought pitched battles, it was to protect their existence. Even after the battle of

Plassey, the English in Bengal did not display any particular desire to assume the role of governors. As a matter of fact Clive was not willing to undertake the administration of Bengal but he solved the difficulty by accepting for the company the *divani* or treasurership of the Bengal provinces. Every one knows that the British empire in India was not the result of a deliberately planned scheme of conquest. A chain of untoward circumstances paved the way for it. It is too much therefore to say that Nubkissen foresaw that the British would become the ultimate rulers of the land and therefore helped the English. It is certainly a pity that Mr. Ghose should try all manner of arguments to disprove the allegation that Nubkissen was a "traitor" to his country. And it seems to us that the special pleading of Mr. Ghose only tends to damage the reputation of his client. Mr. Ghose wants us to be grateful to Nubkissen, because British rule has proved beneficial to us. Suppose it had proved otherwise and like other foreign conquerors of India the English had oppressed the people and the country, what sort of defence would Mr. Ghose set up for his hero? India has every reason to be thankful to Nubkissen for his having helped the British who ultimately have become the rulers of the land. Out of evil cometh good. Out of the questionable doings of men, individuals and nations have built up their position and afterwards used them for the benefit of humanity. But not all the good and glorious work of such men can white-wash the moral taint attaching to their character. Indeed, in judging the character of men who have played a prominent part in building empires and states, it is not politic to apply a rigorous code of ethics. Politics and ethics have never been happy allies. Mr. Ghose may claim mercy for Nubkissen, but to hold him up as a model of character, to gift him with the spirit of the patriot and the eye of the statesman, to ask for him a clean certificate of character is displaying the disease of the biographer with which we are afraid Mr. Ghose has been considerably infected. We have heard a good deal of Mr. Ghose's high scholarship and learning, and it is with great reluctance that we have been forced to criticise him in this manner. We admire his scholarly diction, but we regret we cannot agree with him in his estimate of Nubkissen. We sincerely hope that ere long we may have the benefit of another book from the pen of the talented editor of the *Indian Nation* worthy of the high esteem in which he is held by his countrymen.

AN INDIAN.

The World of Books.

A SHORT HISTORY OF CHRISTIANITY

by J. M. Robertson (London: Watts and Co.)

Mr. Robertson's views on matters religious are well-known. He is one of the high-priests of rationalism. To him religion and its inspiring influence have no meaning. Supernaturalism is an absurdity. What to many has been a source of comfort and consolation is more or less an object of ridicule in the hands of Mr. Robertson.

In this book he delivers a powerful and fervid attack on Christianity in theory and practice. He exposes the hollowness of the extravagant claims made on behalf of Christianity by its devoted votaries. With his protests against the organised and external forms of the religion, many would be inclined to sympathise but for the fact that Mr. Robertson attacks the root principles of the religion itself. His general criticisms are applicable not only to Christianity but to all other religions. He is not a friendly critic deploring the existence of the excrescences of religious forms and beliefs and pleading for their removal alone. But he is a merciless foe to religion and to Christianity in particular. It would be unfair for a Hindu critic to attempt anything like a critical examination of Mr. Robertson's book, and we content ourselves therefore with merely stating the conclusions which the author arrives at in regard to the influence of Christianity on mankind.

Speaking first of the moral influence of Christianity, Mr. Robertson observes that it has been for the worse. He sees no specific value in dogma as a moral restraint nor does he admit that supernaturalism exercises any better influence. While admitting that there may and do arise modifications of the religious formulas of ethics, there is absolutely no reason, Mr. Robertson says, to apprehend that any form of conduct will be less considerate on naturalist than on super-naturalist principles. He observes:—

"The Christian doctrine of forgiveness for sins must do more to encourage license than can be done by any rationalistic ethics. Even where naturalism might give a sanction which Christian dogma withholds, as in the case of suicides, it is not found that any statistical change is set up by unbelief. Poverty again has probably been normally worse in Christian Europe throughout the whole Christian era than in any previous or non-Christian civilisation; and the most systematic schemes for its extinction in recent times are of non-Christian origin, though a personal and habitual effort to modify the stress of poverty is one of the more creditable features of organised Christian work. As regards crime, the case is much the same. The vast majority of criminals hold supernatural beliefs, atheism being extremely rare among them; and while many Christians have in the

past done good and zealous work towards a humane and rational treatment of criminals, the only scientific and comprehensive schemes now on foot are framed on naturalist lines and are denounced by professed Christians on theological lines, as being sinfully lenient to wrong-doing. This supernaturalism remains prone to a cruel and irrational ideal of retribution.

Speaking of the influence of Christian religious teaching on international relations, Mr. Robertson says:—"The saddest conclusions are forced upon the student of religious history." He asserts that organised Christianity has been potent to promote strife and slaughter and impotent to restrain them.

If any instance could be found in history of a definite prevention of war on grounds of Christian as distinguished from prudential motive, it would have been there recorded. So flagrant is the record that when it is cited the Christian defence veers round from the position above viewed to one which unconsciously places the source of civilisation in human reason. Yet even thus the historic facts are mis-stated. The enormity of Christian strifes in the past is now apologetically accounted for by the fantastic theorem that hitherto men have not "understood" Christianity and that only in modern times have its founder's teachings been properly comprehended. Obviously there has been no such development; the Gospel's inculcations of love and concord are as simple as may be and have at all times been perfectly intelligible; what has been lacking is the habit of mind and will, that secures the fulfilment of such precepts. And recent experience has painfully proved once for all that the religious or "believer's" temper, instead of being normally conducive to such action, is normally the worst hindrance to it.

In defence of this sweeping condemnation, Mr. Robertson instances the attitude of Christians towards the War in South Africa. He wishes it to be noted as a decisive fact in religious history that in regard to the war the movement of critical opposition and expostulation succeeds almost in the ratio of men's remoteness from the Christian faith and he asserts as being statistically clear that the standing claim for the conventional creed as being peculiarly helpful to the cause of peace is false. Mr. Robertson then goes on to point out how the influence of Christianity has been baneful to intellectual progress.

So far as it can be historically traced the intellectual influence of Christianity was relatively at its best when it began to be propounded as a creed in critical relation to Judaism. Intellectual gain was checked as soon as it became a substantive creed demanding submissive acceptance. From that point forward it becomes a restraint on intellectual freedom, save in so far as it stirred believers to a one-sided criticism of pagan beliefs, a process of which the educational effect was promptly annulled by a veto on its extension to the beliefs of the critics.

Mr. Robertson holds that every country presents some special type of intellectual harm or dissimulation resulting from the presence of orga-

nised Christianity; and in all alike it makes in varying degrees an obstacle to light.

Mr. Robertson thus sums up the conclusion he arrives at:—

It follows from the foregoing history and survey that Christianity, regarded by its adherents as either the one progressive and civilising religion or the one most helpful to progress and civilisation, is in no way vitally different from the others which have a theistic basis and is in itself neither more nor less a force of amelioration than any other founded on sacred books and supernaturalist dogmas. Enlightened Christians with progressive instincts have justified them in terms of Christian doctrine even as enlightened Moslems, Brahmans and Buddhists have justified their higher ideals in terms of their doctrine, and the special fortune of Christianity has lain in this, that after nearly a thousand years in which it was relatively retrograde as compared with Islam which in the latter half of the time was progressive, both being what they were in virtue of institutions and environment, the environment was so far politically changed that the Christian countries gradually progressed while the Moslem countries lost ground. To day it is becoming clear to instructed eyes that the faiths were not the causal forces, and in Asia the rapid development of Japan in the nineteenth century has vividly demonstrated the fallacy of the Christian view. As there was great progress under ancient Paganism, under each one of the great creeds or cults of Asia, under Islam, and under Christianity, so there may be much greater progress in the absence of them all, in virtue of a wider knowledge, a more scientific polity and a more diffused culture.

His forecast of the future of Christianity is dismal. "A confident faith in continual progress is," says Mr. Robertson "one of the commonest states of mind of the present, the consciously scientific age; and in view of the unmistakable decadence of the creeds as such, it is natural to rationalists to expect any early reduction of Christianity to the status now held by "folk-lore," a species of survival dependent on ignorance upon the one hand and antiquarian curiosity on the other." But he is careful to state that while this may be called probable, there can be no scientific certainty in the matter, because the process must for economic reasons be much slower than used to be thought likely, for, instance, in the time of Voltaire, who allowed a century for the extinction of the Christian creed. Voltaire was so far right that a century has seen Christianity abandoned, after a reaction by the best intelligence of our age, as it was by that of his. Mr. Robertson thinks that there may be more reactions, and that there is always a conceivable possibility of a total decadence such as overtook the civilisation of the old Mediterranean world.

JIM, THE PENMAN: By Dick Donovan : George Bell & Sons : London.

A thrilling story whose interest is well sustained to the end. The hero, Captain Bevan of many

aliases, is the essence of that latest product of the day, the scientific criminal. He has carried the art of forgery to the highest pitch of perfection as a fine art, and astounds the world in general and the financial world in particular by unheard-of achievements in his special forte. Becoming the notorious head of one of the greatest confederacies of international criminals, he earns the *sobriquet* of Jim, the Penman, and perpetrates frauds which simply confound the greatest of banking corporations, and at every step made by the latter to protect themselves by new inventions, he rises to the occasion and effectually checkmates them by the inventive force of his genius. A few bold strokes, and he amasses a considerable competence and buries himself under an obscure name in a remote part of the country in the character of a rural gentleman of scientific pursuits, whose hobby, strangely enough, is the discovery of a real cure for snake-bite. But in this Jim reckoned without his Nemesis, which finds him out and relentlessly persecutes him in the shape of an old confederate, who had been the first to lure him to crime. When rogues fall out, honest men get their own, runs the homely adage, and true to the old saying, what the efforts of the most celebrated detectives failed to accomplish was brought about by the fatuous quarrel between the criminals themselves. The fight between the two whilom confederates inextricably brings both within the meshes of the law, and the scientific criminal who was in one sense a victim to the conditions attaching to present-day civilization, and the other who was so to speak a criminal by natural inclination, receive an even treatment at the hands of Law which sends them both to the same fate of penal life beyond the seas. Here also the two are thrown together, and their career comes to a fitting and abrupt termination by an act of mutual violence.

The underplot of the story is the beautiful love romance between Jim's daughter Marie and a Wilfried Leonard, himself the son of a notorious criminal who had slain his own wife. The children of criminals, each is a perfect specimen of the noblest humanity, and they try to escape from each other when severally awakened to the knowledge of the sins of their parents. But fate, which ever unerringly works out its own inscrutable decrees, brings them both together in the end and joins them to work out their common destiny. The story of their love is charmingly told, and is full of pathos in the various obstacles which bar the course of their true love.

THE GROWTH OF THE EMPIRE by *Arthur W. Jose, John Murray, Albemarle—6s.*

The author of this book modestly styles it "a handbook to the history of Greater Britain." *Handbook* gives but an inadequate idea of the nature and contents of this useful publication. It is a clear and fairly comprehensive account of the story of the rise and growth of the British Empire, and we have no doubt that all who are anxious to acquaint themselves with the origin and growth of Greater Britain will find Mr. Jose's book of great aid.

Mr. Jose traces the history of the building of the British Empire from the reign of Queen Elizabeth and carries it up to date. The history of Empire-building in America, India, Australasia, and Africa is told in a readable form. India is often said to be the pivot of the Empire. In this book Mr. Jose points out that it has been the central motive of Great Britain's expansion. "To reach India our adventurers threw themselves upon America; to guard the Indian trade we seized South Africa; upon India converge the routes that are dotted from end to end with our forts and coaling stations. And the struggle for India has been a struggle against France. From France we took Canada; just, and only just ahead of France we secured Australasia; it was for fear of France that we deprived Holland of the Cape Colony." In summing up the history of Great Britain's colonial development, Mr. Jose points out that from end to end, the great fabric of the British Empire has been built up by the adventurousness of men always ready both to fight and to trade. Everywhere, says Mr. Jose, it is the race, not the state as such that has done the permanent work of colonisation. It was a private company which founded Massachusetts, it was a private company which won Bengal, and it is a private company which has sown the seeds of empire-building in South Africa. "It must be noted, however, that while private enterprise has nearly always taken the initiative and has often carried its adventurous achievements through, without State help, yet the State has helped." For the last 150 years, British war policy has mainly been commercial and colonial in its aims, not dynastic or ministerial.

Since Walpole was forced into unwilling war with Spain by the smuggler merchants of London, the popular voice has generally instigated and always supported the policy of fighting. For Britain, since then the day of King's wars has been over: the one King's war of that period,—the War of American Independence—was at first backed by a popular feeling that counted the colonists ungrateful, and when it lost that backing it died a natural death. In other countries we have

still seen wars brought on for the sake of a dynasty or to distract attention from a vicious government at home; but it was not the Hanoverianism of George II or the anti-republicanism of George III, that set us fighting in 1755 and 1793; it was the insistent and inevitable demand of British settlers and British traders that their expansion should be unhindered by land and sea. And to maintain this, the nation has never refused to spend blood and treasure like water. The National Debt is the memorial of its lavishness, the capital which it has raised without stint to found and establish this great joint-stock business that we call the Empire."

We must never forget, adds Mr. Jose, that the home Briton pays in peace-time nearly two-thirds of his income tax as interest on that capital and therefore as the price mainly of colonial freedom. An account of the actual amount at which colonial freedom has been bought may be interesting.

£35,000,000 was the price of Nova Scotia and apart of India, since the profits of the *Assiento* contract went to establish the British Company in India.

£87,000,000 was the price of American freedom—the expulsion of France from Canada; and if £ 116,000,000 was spent in trying to retain within the Empire the colonies which had already cost so much, it was scarcely too dear a price at which to buy the ruin of personal monarchy and the bankruptcy of monarchic France.

Finally £621,000,000 spent in the great European wars that crushed Napoleon and established our supremacy on the oceans, is the price of Australia and South Africa, and of the power to expand into new lands without disturbance that we enjoyed for seventy years after Waterloo. We have no doubt the next edition of this book will contain the terrible bill of the present South African War.

The University Tutorial Press has just issued a fifth edition of R. W. Stewart's "Text Book of Magnetism and Electricity." It is a companion volume to the Text books of Heat and Light by the same author. We are glad to observe that this treatise is marked by the clearness, pointedness and brevity characteristic of the author. Considering the purpose of the book, the treatment of the subject is full and exhaustive, and we hope that it will not fail to be useful to those for whom it is intended and will no doubt serve as an introduction to an elaborate study of the subject.

Topics from Periodicals.

INDIANS AND THE EMPIRE.

"Dewan" who is stated to be the Prime Minister of an important Native State in India pleads in the columns of the April number of the *Contemporary Review* that advantage should be taken of the coming coronation in June next to fasten tighter the bonds of association and sympathy between England and India. The writer remarks that it is a curious paradox that while the growing imperialism of the British Empire has been a matter of rejoicing to thoughtful Indians, it has also been the occasion of many a moment of sad reflection in their minds. Times out of number it has been proved that the independence of India is but a dream, and that her self-preservation was only possible by placing herself under the aegis of a powerful ruler. It has ever been the fate of the past conquerors of India gradually to lose their robust manhood in the course of a few centuries and succumb to weakness and luxury, with direful results to the peace-loving inhabitants of the country, till a strong power once more established itself and guaranteed to them protection against the hordes of greedy marauders and unscrupulous adventurers that generally rise up in troublous times. It was in reality a source of satisfaction, therefore, that to such a nation as the English, with a genius for administration and a passion for liberty and justice, God had entrusted the destinies of this country.

Queen Victoria's Proclamation of 1858, and her assumption of the title of Empress in 1877, were hailed with delight throughout the Indian Continent, and a feeling of pride in being citizens of the British Empire had begun to grow up in the minds of the Indians. But unfortunately, says the writer, the two Jubilees of the late Queen-Empress which heralded the approach of imperialism among the white inhabitants of the British Empire and awakened a sense of oneness between the mother country and the colonies, made the people of India feel a disparity in affection as compared with their fellow subjects in other parts of the Empire.

This sudden revelation gave a rude shock to the many pleasant dreams with which the people were beguiling themselves of the coming greatness of their country under the imperial rule of England and to thoughtful minds especially it was as much a source of humiliation as of anxiety for the political future that India should not be allowed to march in line with other parts of the Empire.

"Dewan" points out that if imperialism should bring in its wake indifference towards the Indians

the latter will not be to blame if the edge of their present keen sense of loyalty becomes blunted. India is more interested in overcoming such feeling; for her risk, if the English depart, is great. She will be a helpless victim at the mercy of any and every adventurer. She has had enough of such experience in the past, and she can only look up to England in her benevolence to be allowed to mingle her interests for all time to come with those of her protectress. The writer urges:—

In the first place Indians should be allowed more opportunities of cultivating devotion to the person of their Emperor, and in the second place a natural feeling of pride and glory in being associated with the British Empire should be allowed to grow in their minds. The feeling of "*Civis Romanus*" should be common alike to the Englishman and the Indian.

It is very desirable, therefore, not less in the interests of the empire than of the individuals concerned, that they should have free opportunities of paying their homage in person to their Sovereign-Lord and of rubbing off their own angularities by acquaintance with foreign institutions and by association with new minds. In the words of the Viceroy, the days are gone for ever when the ignorant and backward can sit in the seat of authority. The creation of facilities for the princes and noblemen of India to visit all parts of the British Empire can only tend to the stability of that Empire. It enhances the prestige of these personages in their own country and creates in them, and through them in those around them, an interest in the countries they visit.

He goes on to point out that the accident of the British Government being an alien Government has had the effect of elevating the Princes and noblemen of India as the social heads of the whole country, and as such their influence cannot be overrated. He asks, is it political wisdom on the part of the British Government to ignore this source of strength which, as it were, lies too ready to its hands? The Gaekwar or the Nizam or the Maharajah of Mysore is forced by existing circumstances to feel but an academic interest in the political affairs of the Empire. The social influence of all these noblemen is immense, both where they live and in other parts of India; but how is it to be utilised for the benefit of the British Government?

The writer winds up his article with a personal appeal to the present Viceroy:

Lord Curzon has in various ways been enlisting the interest of the Indian people in the British Government. His Cadet Corps is a happy move in that direction. It would be to His Lordship's lasting credit if he went a step further and persuaded the British Government to give an honoured place to the Indian Princes in the ranks of the Imperial Army, and to trust them with commands in the field when occasions arose to defend the Empire against external danger. It would be a clever stroke of policy to incorporate the noblemen of India among the aristocracy of the Empire by conferring British titles on

them. Outside the limits of India no Indian nobleman feels sure of his rank, and thus has no personal interest in the affairs of the Empire. By thus recognising and rewarding the undoubted loyalty and good faith of the Indian people, Lord Curzon would be cementing the foundations of the Empire, and evoking in the minds of the Indian people the pride of being citizens of a mighty Empire unsurpassed even by Rome.

WHAT IS VEDANTA?

"Many people," says Swami Abhedananda, in the course of an article in the *Prabuddha Bharata* for April, "have the erroneous idea that by Vedanta Philosophy is meant a philosophy confined exclusively to the Vedas, or Sacred Scriptures of India; but the term "Veda" in the present case is used to signify, not a book, but "wisdom," while "anta" means "end." Vedanta, therefore, implies literally "end of wisdom"; and the philosophy is called Vedanta because it explains what the end is and how it can be attained. All relative knowledge ends in the realization of the unity of the individual soul with the ultimate truth of the universe. That ultimate reality is the universal Spirit. It is the infinite ocean of wisdom. As rivers running across thousands of miles ultimately end in the ocean, so the rivers of relative knowledge, flowing through the various stages of the phenomenal universe, ultimately end in the infinite ocean of existence, intelligence, bliss, and love."

To realize this unity must be the aim of all true religions, but, the Swami holds, the religious history of the world shows that no other nation has ever at any period understood it so clearly, or preached it so boldly, as did the sages among the ancient Aryans who inhabited India. For nearly five thousand years, indeed, India, has held in her bosom the sublime idea that "Truth is one, but the means of attaining it are many." In the Rig-Veda, the most ancient of all known scriptures, we read, "That which exists is one, men call it by various names." The Jews call it Jehovah; the Christians, God or Father in Heaven; the Mohammedans worship it as Allah; the Buddhists, as Buddha; the Jains as Jina; while the Hindus call it Brahman.

Upon this fundamental truth rests the whole structure of Vedanta teaching and students of comparative religions are coming to recognize that because, more than any other religion or philosophy of the world, it insists upon this doctrine of the unity of existence under a variety of names, it offers, as can no other, an adequate foundation for all the different phases of dualistic, qualified non-dualistic, and monistic systems of religious thought. Vedanta, indeed, may be said to establish a universal religion which embraces all the special religions of the world.

This uniquely universal character, moreover, is still further emphasized by the fact that it is not built round any particular personality.

Any religion or philosophy that depends for its authority on a specific personality can never satisfy the demands of a universal religion. In order to make a system of philosophy or religion universal, the first thing necessary is that it be absolutely impersonal. So long as there is a founder of a religion, so long is it limited by the personality of the founder, and cannot be universal, as we find in special religions like Christianity, Mohammedanism, Buddhism, and kindred faiths. The followers of each of these great religions, forgetting the principles, become attached to the personality of the founder and refuse to recognize any other; and this results in the discord, conflict, and persecution with which the pages of religious history are filled.

The system of Vedanta has many phases;

The dualistic phase includes the fundamental principles of all the dualistic or monotheistic systems, such as Zoroastrianism, Judaism, Christianity, and all systems that advocate the worship of the personal God, or devotion to any divine ideal.

The qualified non-dualistic phase embraces all the systems which teach the immanency and transcendency of God. It includes all such ideas as "God dwells in us as well as in the universe"; "We live and move and have our being in God"; "He is the soul of our souls"; "We are parts of one stupendous whole"; "We are the sons of God, the children of Immortal bliss," etc. But the monistic phase of Vedanta is the most sublime of all. Very few thinkers can appreciate the grandeur of spiritual oneness. Yet herein lies the solution of the deepest problems of science, philosophy, and metaphysics, and the final goal of all religions. It alone explains how it is possible for one to say, "I and my Father are one."

Vedanta is a system of religion as well as a system of philosophy. There are, it is true, many systems of philosophy in Greece and Germany, but none of them, the Swami contends, has succeeded in harmonizing itself with the religious ideals of the human mind; or has shown the path by which man can attain to God-consciousness and emancipation from the bondages of ignorance, selfishness, and all other imperfections, in so rational a way as has the Vedanta philosophy in India. It does not ask anybody to accept or believe any thing which does not appeal to reason, or which is not in harmony with the laws of science, philosophy, and logic. But in India, it must be remembered, religion, has never been separated from science, logic, or philosophy. As a consequence, Vedanta, ancient as it is, is none the less in strict accord with the ultimate conclusions of modern science, preaches the doctrine of evolution, and still has room left for all truths which may be discovered in future.

There is another notable feature of Vedanta; it does not prescribe to all one special path by which to reach the ultimate goal of every religion. On the contrary it recognizes the varying ten-

endencies of different minds, and guides each along the way best suited to it. It classifies human tendencies into four grand divisions, which, together with their sub-divisions, cover almost all classes of people; and then it sets forth the methods which may be helpful to every one. Each of these methods is called in Sanskrit "Yoga."

The First is Karma Yoga.—

It is for the active man, for those who like to work and are always ready to do something for the help of others: in short, it is for the busy, every-day working man or woman. Karma Yoga teaches the secret of work and tells us how we can turn our daily tasks into acts of worship, and thus reach perfection in this life through work and work alone. It is essentially practical and absolutely necessary for those who prefer an active career for it will teach them how to accomplish a maximum of labor with a minimum loss of energy.

The next method is Bhakti Yoga.—

It is for such as are of an emotional nature. It teaches how ordinary emotions can bring forth spiritual unfoldment of the highest kind and lead to the realization of the ultimate ideal of all religions. In a word, it is the path of devotion and love. It explains the nature of divine love and shows us how to turn human love into divine, and thus fulfil the purpose of life both here and hereafter.

The third is Raja Yoga—the path of concentration and meditation.

The field of Raja Yoga is very vast. It covers the whole psychic plane and describes the processes by which the psychic powers are developed, such as thought-reading, clairvoyance, clairaudience, the evolving of finer perceptions, the going out of the body, the curing of disease through mental power, and the performing of all such acts as are ordinarily called miracles. All the psychic powers which were displayed by Jesus of Nazareth and his followers, and which are used to-day by Christian Scientists, mental healers, faith healers, divine healers, and the various other kinds of healers, have been displayed from ancient times by the Yogis in India.

Raja Yoga takes these psychic powers and phenomena, classifies them and makes a science out of them. It also teaches the science of breathing. The wonderful effects of breathing exercises on mind and body are not unknown to the mental healers of the West. If, however, Raja Yoga deals scientifically with the psychic powers, it does not cease to warn its students that the attainment of any of these powers is not a sign of spirituality. This is a great lesson which the mental healers and Christian scientists of this country especially, will have to learn from the Yogis of India. Little brains and weak intellects easily turn away from the path of spiritual truth when some psychic power begins to manifest itself and they think that they have reached the highest state of spirituality because they have the power to cure head-ache or heart-ache. Raja Yoga, however, teaches that the exercise of psychic power and the making a profession of it are great obstacles in the path of spiritual advancement. Its principal aim on the contrary, is to lead the students, through concentration and meditation, to the highest state of super-consciousness, where the individual soul communes with the universal spirit and realizes the unity of existence, eternal peace and happiness.

Jnana Yoga is the fourth method.

It is the path of right knowledge and discrimination. This is for those who are intellectual, discriminative, and of a philosophical nature.

Thus we can see in some slight degree how universal is the scope of Vedanta. It also explains the fundamental principles of spiritualism; tells us how the soul exists after death and under what conditions; what kind of souls can communicate with us, and what becomes of them afterwards; how the earth-bound souls, being subject to the law of Karma or Causation, reincarnate on this earth, taking human form again and again. It explains the science of the soul: and it expounded the law of correspondences ages before Swedenborg was born.

The Swami thus concludes the article:

The religion of Vedanta accepts the teachings of all the great spiritual teachers of the world, recognizes them as Incarnations of Divine Spirit, and has room for those who are yet to come for the good of humanity.

Vedanta explains the basis of ethics. Why should we be moral? Not because some one has said this or that; not because it is written in a certain chapter of a certain scripture, but because of the spiritual oneness of the universe. If you injure another, you injure yourself. If you are wicked, you not only do harm to yourself but also to others. It also explains through this spiritual oneness why we should love our neighbours as ourselves, because in spirit we are already one with that neighbour.

The ethics of Vedanta bring peace and harmony to the religious world. Wherever Vedanta reigns, religious toleration and co-operation among all sects prevail and religious persecution ceases forever.

A student of Vedanta does not belong to any sect, creed, or denomination. He is neither a Christian, nor a Mohammedan, nor a Buddhist, nor a Jain, nor a Hindu; yet in principles he is one with all. He can go to a church or a mosque or a temple. He is a follower of that nameless and formless Eternal Religion, which underlies all the special religions of the world; and as he grows into a deeper and deeper understanding of this universal religion, he cannot but declare, as did Professor Max Muller, "Vedanta has room for almost every religion; nay it embraces them all." And so it must, because its whole teaching is based on those all-inclusive words of the Blessed Lord Krishna in the Bhagavad Gita:

"Whosoever comes to me through whatsoever path, I reach him; all men are struggling in the paths which ultimately lead to ME, the Eternal Truth."

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EDUCATION IN JAPAN

In the April number of the *East and West*, there are two articles of special interest relating to Education in Japan. Mr. M. Tokiyeda gives an account of the educational system of Japan. Rai Bahadur Lala Baij Nath gives a *resumé* of an interesting conversation he had with Mr. O. Kakura Kakuzo, a member of the Archaeological Commission of the Japanese Government and formerly principal of the Tokio Fine Art Academy. This account of the educational administration of Japan at a time when there is an urgent demand in India for the re-organisation of the system of public education may serve, says the author, as a hint for the solution of the problem.

The miraculous progress of Japan during the last thirty years is not imperceptible even to the ordinary observer. At the root of this progress lies her educational system built upon a firm foundation. The Department of Education forms one of the ten central executive departments. It is controlled by three main bureaus and a number of educationists specially appointed for the purpose, and a Minister is appointed to preside over the whole. Under the Minister are four secretaries, seven councillors and nine school inspectors. There is also a Council of higher education, consisting of forty-eight members, and another of school sanitarium having eight members. The three bureaus controlling the educational department in Japan are :—

(a) The Bureau of Special Education, which has, among others, the right of conferring degrees and the power of sending out students to foreign countries. Universities, including high schools, special schools, libraries and museums, astronomical and meteorological observatories, geological and earthquake investigation branches, the Tokio Academy, and the Science Association, are controlled by this bureau.

(b) The Bureau of General Education, which has authority over normal schools, middle schools, common schools and Kindergartens, higher female schools, schools for blind and dumb, educational museums, common educational associations, and has control of the education of children of school-going age.

(c) The Bureau of Technical Education, which controls technical schools, agricultural schools, commercial schools, mercantile shipping schools, technical apprentices and preparatory schools, and training schools for technical teachers.

The following gives a rough idea of the course of education now obtaining in Japan ;

There are, first of all, several kindergarten schools in Japan ; but it must be noted that only well-to-do children are trained there. Then come the common primary schools, with a course of elementary instruction extending over four years ; these are followed by what are called the higher primary schools preparatory to middle schools

(with a course of two years), and higher primary schools proper (with four years' course). It may be observed that, up to this stage, the primary school education is compulsory, and the school-going age varies from six to fourteen years. If the parents of a student, who has attained the school-going age, are too poor to afford him even this short course of primary instruction, there are associations in Japan, who pay for the education of such students. Immediately after this compulsory course follow the middle school (five years' course), higher schools for women (four years' course), and normal schools (four years' course for male and three years for female students). Boys and girls receive their education together up to a certain age, after which they are taught separately. In the higher stage may be included the higher schools preparatory for the University (3 years' course), higher schools proper (4 years' course) higher normal schools (with a course of 4 years for male and 3 years for female students), and the College for women. A further course of three or four years at the University Colleges entitles the successful candidate to the degree of graduate, or, as it is called in Japan, the *Gakushi*, either in Law, Literature or the Sciences. In the final course, extending over five years, at the University Hall, a *Gakushi* may obtain the degree of *Hakushi*, corresponding to the M. A. degree of the Bombay University, provided he writes a thesis on a prescribed subject which is approved by the University authorities.

In Japan there are primary schools where a course of 4 years is had, middle schools with a five years' course of training and higher schools the course of which extends over two, three or four years. Among the subjects taught in these may be mentioned a series of lessons on morality, Japanese and Chinese language, foreign language, agriculture, geography, history, mathematics (including arithmetic, algebra, geometry and trigonometry), natural history (zoology and botany), physics, chemistry, Japanese and Chinese penmanship, drawing, singing, book-keeping and athletics.

A short account of the Tokio Imperial University, may not be out of place. The University consists of six Colleges, all in one big compound, except the Agricultural College. There is one President for the whole University and one director presides over each College. The Colleges are the Colleges of Law and Medicine each comprising a four years' course and the Colleges of Engineering, Literature, Science and Agriculture each with a course of three years.

Japan has two Universities, one at Tokio and the other at Kioto. Both teach as well as examine. The former has about 300 and the latter about 180 professors. The faculties are composed of literature, law, medicine, engineering, and science. The professors are mostly Japanese who have taken high honours in their respective subjects in Germany, France, Austria or America. Some of the professors are also Europeans and Americans. But

in all cases only young men of great promise are employed. The salaries of these professors range from 6,000 to 2,000 yen a year. The instruction is mostly given in the Japanese language, though European professors give it in their own tongues. Students have to learn either French or German. When they pass they get employment under Government or in private mercantile or manufacturing offices. They start from 1,000 yen a year. The demand is greater than the supply, and a graduate in Japan is seldom unemployed. There is only one degree called the *Gakushi*. A doctor's degree, called *Hakushi*, is always given on presentation of a paper of original research on a scientific or literary subject. The Tokio University contains about 800 and the Kioto about 400 students. All these live in the town and only go to the University to hear the lectures.

Rai Bahadur Baij Nath in his article on "Prospects of Education in Japan" says that Indian students are heartily welcome in Japan; there are lectures given in English for their benefit, and the Indian graduates coming out of the Technical Colleges of Japan are treated exactly like their own graduates. The conditions of India are somewhat similar in that India like Japan has to adopt Western methods of production to Eastern requirements and Eastern capital on a much smaller scale. If by the sympathy shown to the Indians, India adapts herself to Japanese Education, much that may be useful might be introduced in India. There are greater facilities in Japan for Indian students than in England or any other country. The following information regarding the cost of education in Japan for Indian students may be useful;—

The fee charged is about 6 yen or Rs. 10 a month. Board and lodging cost about Rs. 25 or Rs. 30, books about Rs. 10, and clothes another Rs. 10 a month, unless the student is inclined to be fashionable. For an Indian student the expense will be a little higher, as he may have to employ a servant for cooking his food and attending to his general wants. This will cost him Rs. 15 or Rs. 20 a month. Under the Universities are five high schools situated in five principal places—Tokio, Kioto, Kumamoto, Sendai, and Kanazawa. These schools prepare for the Universities as well as for the public services. Each of them contains about 1,000 students. The fee is 4 yen, and the course is for three years, and boys are admitted at the age of 16. When they come out of the school they get service on about 50 yen a month. In addition to these they have technical and commercial schools all over the country. There are two high and commercial schools at each chief centre for its own industry. In Tokio, instruction is given in every art and industry, and the system is not only good but will compare favourably with Europe.

JAPANESE UNIVERSITY FOR WOMEN.

Mr. Ernest W. Clement gives in the April number of the *Chautauquan* an account of the first Japanese University for Women. The institution owes its origin to the self-sacrificing efforts of Mr. Naruse who made his countrymen realise the value of higher education for women. He went to America to study the system of education given to women there, and on his return to Japan was able to persuade a number of wealthy persons to overcome their prejudices against the higher education of women and also to contribute large sums to the University for women.

The faculty of the first Japanese University for Women number forty-six in all, among whom are several professors of the Imperial University. The president is Mr. Naruse, and the dean is Professor S. Aso, a Doshisha alumnus. There are also several women among the faculty, and it is the purpose to have as many women teachers as possible. There are two foreign teachers, Mrs. C. M. Cady, formerly of Kioto, and Mrs. Leonard of Tokyo. The chairman of the board of trustees is Count Okuma.

There are three departments in the University course: 1. Department of Domestic Science. 2. Department of Japanese Literature. 3. Department of English Literature. In each department there are twenty-one hours of required studies and seven hours of electives, per week. The school session is from 8 A. M. to 12 noon and for some classes from 1 P. M. to 4 P. M., every day except Sunday. In the first department the greater part of the time is devoted to various practical branches of applied and domestic science; in the second and third departments the principal study is Japanese and English, respectively. Ethics, sociology, mental philosophy, and education (including child-study) are the required studies in all departments, and drawing, music, and the science of teaching are electives in all cases.

The *raison d'être* of this University for Japanese Women was clearly set forth in Count Okuma's address at the opening ceremony of the institution. He pointed out that all countries, such as Turkey, Africa, Persia, and even China, which had attempted "to work with the male sex as the single standard," had "fallen signally behind in the march of progress," and that "Japan, by raising woman to her proper place, should provide herself with a double standard." He also emphasized the fact that the only effective medicine for social abuses was in "a radical reform of family life through an improvement in the status of women."

THE MAHOMEDAN LAND THEORY.

Professor S. Sathianadhan of the Presidency College, Madras, contributes to *United India*, the first instalment of an article on this question. He says, in all their dealings with conquered races, Mahomedan rulers never lost sight of the principal motive which underlay all their conquests, which was to bring within the pale of their religion all the nations of the earth. Religious propagandism was the one main object of their invasions. Though they were unable to carry out the very rigid doctrines of the Koran regarding the absolute necessity of converting infidels, still Mahomedan administration everywhere was based on the supposition that those who did not belong to the class of the faithful, were not entitled to the same rights as those who did belong to this class. We see this principle carried out fully, especially in the matter of taxation. The land-tax of Musalmans came under two classes, one called the *oosh* which was a light tax, imposed only on believers, and the other called *khiraj*, which was imposed on the conquered races who were unbelievers.

The *khiraj* itself was of two kinds: one known as the *mookasumah*, consisted of a proportion of the actual produce of the land and varied between one-sixth and one-fifth of the actual crop, and it seems to have become assimilated, in most cases with the *oosh*; and the other known as *wuzeefa*, which was not based on the actual crop, but on what was estimated as the capability of the land. The obligation to pay this class of *khiraj* was considered "a personal liability on account of a definite portion of land," whether productive or not, whether cultivated or not. It was the *wuzeefakhiraj* that was imposed on unbelievers. Considering that Mahomedan rulers claimed always a part of the produce of the land from cultivators, whether unbelievers or not, it is clear that, like the Hindu rulers, they regarded the sovereign as having an interest in the land.

It has been argued by some that when, instead of claiming a proportion of the actual produce, the Musalman rulers claimed a fixed rate independent of the actual yield of the land as was the case in the *wuzeefa khiraj*, this indicated a change in theory of ownership, and that the land was no longer regarded as the joint property of the sovereign and the cultivator, but as the sole property of the cultivator alone. Mr. Sathianadhan does not see the force of this contention. He thinks the change from the *mookasumah* to the *wuzeefa* form of the *khiraj* was effected, not because there was a change in the idea of ownership in land, for such subtle points in land law were never discussed in the older days, but because the *wuzeefa* form of the tax was more easily collected than the *mookasumah* form, which depended upon a complicated estimate of the actual produce of the land which it was not possible to make

at all times. Regarding the Mahomedan conception of sovereign rights in land, the writer remarks that though there was no definite enunciation of these rights anywhere, the very fact of the rulers demanding as a right a certain proportion of the actual produce (as in *mookasumah*), or a certain fixed rate based on an estimate of the capability of the land (as in the *wuzeefa khiraj*), shows that the sovereign right in the land was tacitly understood to rest with the rulers.

Mr. Sathianadhan then gives an account of the revenue system and the reforms introduced by Akbar. Akbar's land revenue policy was one of conciliation. He carried out the first land settlement and survey of India. In the first place, he abolished all arbitrary taxes,—such as the *jazia* or tax on non-Mahomedans or infidels—he fixed upon a definite standard measure of length as well as of area, and introduced a workable scheme of taxation based upon the true capacity of the land. For this purpose, he divided the land into four classes:—first, *Pootaj* land, that is, land that never lies fallow but which is cultivated for every harvest; second, *Perouty* land which is allowed to lie fallow for a short time to recover itself from exhaustion; third, *Chechan* land, or land which has lain fallow for three or four years owing to various causes, such as excessive rain or inundation; fourth, *Bunjur* land, or land that has been left uncultivated for five or more years. The tax on each kind of land was different, and the rate fixed depended upon an estimate of the capability of the land which was made by taking an average of the produce during three seasons, the best, the middling and the worst, and after this, by fixing the average produce during one season. Allowing for the different qualities of the land of the same class, the average produce of the different seasons was next ascertained, and an average of one-tenth was finally fixed as a fair standard upon which to base the assessment. As for the actual rate of assessment, authorities vary. The evidence placed before the Select Committee of the House of Commons shows that there were several rates.

"If the revenue was paid in kind, the Government share of the ordinary crop was one-half, the crop being appraised on the ground; one-third was taken of crops grown out of season or artificially irrigated, and one-fourth to one-eighth of crops difficult to cultivate. But it is said that all these might be commuted for a fixed money payment of one-fourth of the gross produce called the *rebba*, which was estimated by taking an average of the different kinds of land, irrespective of the actual crop cultivated."

The great object of Todar Mall's settlement was to substitute as much as possible a fixed money rate for the various rates in kind which had prevailed under the complicated system of Hindu rulers.

HOW PORCELAIN IS MADE.

Science Siftings, a popular scientific weekly, contains a readable description of the process of making porcelain.

"Few of the ingredients used for porcelain making are prepared before they reach the potter. The bulk of the materials comes to the factory in its natural state, and is there calcined, ground, sifted and purified of extraneous matter as the different bodies and glazes demand. Like the mills of the gods the mills of the potter grind slowly, but they grind exceedingly fine, the time necessary varying from hours to many weeks. The pulverised materials mixed in proper proportions, are now ready for the "blungers" or vats, in which they are "blunged" in water so as to form a uniform, cream-like mass, called slip, which now goes into the mixing pans, whence it is drawn off and after being sifted through fine silk bolting cloth, such as millers use, it is ready for the caster.

From the mixing room we pass to the clay shop. Here are modelled and cast all the forms. From the clay model a "block mould" in two exactly fitting portions is made of plaster of Paris, and from this block mould a case is made, and from this case in turn as many working models as may be required. Mould making requires much time, foresight and experience, as the modeller must allow for shrinkage in firing (about one-seventh of the size) and guard against the use of forms that will warp or sink in the fire.

The handles, tops of vases, stands, bases are all modelled and cast separately, one piece of ware often requiring as much as half-a-dozen moulds. Besides the moulds used in casting it is necessary to make many devices, such as rings and stands, to hold certain forms in shape while firing.

Then follows the beautiful process of turning the vessel on the wheel. The caster binds together the two portions of the hollow mould, sets it upon his wheel, now revolving slowly, and pours in the creamy "slip" until it is full to the brim. The length of time the slip shall remain in the mould depends entirely upon the size of the vessel and the intended thickness. If thin and small the slip remains but a moment, and is then quickly poured out. A thicker article requires a proportionately longer time. It seems impossible to believe that in that moment's time, as you watched the brimful mould turn on its wheel, enough of the white liquid could adhere to the sponge-like plaster to make the shell of a tea-cup or vase.

But undoubtedly it does. The plaster of Paris absorbs the water in the slip so readily that in a moment's time a crust has formed, which, as it

dries, shrinks away from the mould, while it retains its shape. The mould, still tightly bound together, is then set in the drying room until the ware inside is hard enough to be handled. The good potter knows just how to place the ware in the fire clay boxes called "seggars." He knows just how to bury and cover it in the powdered flint. He knows just where to apply little earthen stilts and rings to keep its shape true and firm. The packing of eggs in a basket is a simple task compared with packing a seggar with tea cups. When complete a strip of moist clay, called a "wad," is laid around the edge of the seggar, and it is placed in the kiln close to the side. Another seggar is placed immediately on top. When the great kiln is filled the door is bricked up and plastered over with clay, and the great furnace underneath is lighted.

When the firing is complete and the kiln has cooled, the ware, now "biscuit," is removed, and a transformation is found to have taken place. The friable, clay-coloured articles are now beautifully white, firm, translucent pieces of porcelain. In the Biscuit ware room, smart young girls carefully select the perfect pieces each of which is rubbed with sandstone, polished with sandpaper and brushed until it is absolutely smooth and free from dust. It is then ready for the dipping room.

Most of the ingredients of the glazing compound in proper proportions are first melted together into what is called "fritt", which is finely ground and mixed with the other necessary materials. All are now ground together in water until the mass becomes a heavy, creamy liquid, into which is plunged the piece of ware. The glaze girl knows just how to toss the vessel so as to obtain an even distribution of coating and avoid a superfluity. A few hours on the rack, carefully guarded from dust, and the "biscuit" is ready for the glaze kiln, a fire of lesser heat, for soft porcelain, than the biscuit fire. Placing the glaze kiln is even more careful work than the biscuit kiln. Seggars must be washed with a special glaze. Flat pieces such as saucers and plates, must be set on fire clay pins, stilts support the handles of cups and vases, and many ingenious devices are brought into use by the careful potter to insure the safety of his kiln. The arrangement of the seggars is the same as before, and the degree of heat is tested by means sometimes of small clay rings or with cones of clay called trials. "Drawing" the kiln takes place as soon after the fires are put out as possible. Into the hot kiln the men go with muffled hands and carry out the seggars, whence the ware is lifted clear and white, ready for the artist's brush or the gilder's stick."

HERBERT SPENCER.

Mr. William C. McBain contributes to the April number of the *Liberty Review* the following poem on Herbert Spencer who completed his 82nd year on 27th April 1902.

With the power which genius wields,
With the intellect's brightest sun,
He hath searched through knowledge's widest fields
And bound all truth into one—
One law of transcendent hue,
And far as we can scan
Stretches the universe through
In a vast unbroken span.
Eternal change,
Through boundless range,
From the dawn of worlds to man.

The miracle-working law
Of motion's rhythmical throb
Which shapes without break or flaw
The Cosmos wonderful robe.
A motion of ceaseless play,
Of sweeping alternate trend,
Evolving, dissolving, refashioning alway,
And before which all things bend.
The magical dower
Of an Unseen Power,
Without beginning or end.

A patience to sift and reap,
A purpose steadfast and bold,
And a mental power of unerring sweep,
For his task of heroic mould.
A life which knew no youth
Gave the glow which devotion brings;
Unfolding the widest cosmical truth
Which through all phenomena rings,
Add by which we see
The wonderful key
To the Transformation of things.

Illusions soil not his page,
Yet a vision of hope he kindles,
Of a far-off golden age,
When man's lower nature dwindles;
When envy, ambition, and strife
Shall yield to the good and the true
As o'er the hilltops of life
Steals sympathy's healing dew.
Beyond us—But still
We must work with a will
For humanity tuned anew.

NATURE TEACHING.

Mr. Francis J. Rowbotham contributes to the April number of the *Journal of Education*, London, an interesting paper on the subject. Touching the educational value of nature-teaching the writer thus sums up its advantages:

(1) The study of natural history calls into healthy action the powers of observation and reasoning. (2) The activity of these powers will be greater if the teaching be founded upon the wide and sound basis of endeavouring to assist the child-mind in the expression of its own ideas; for herein lies the secret of the truly educational aspect of the training. (3) We must train the physical sight to stimulate and serve the vision of the mind. Let us remember the old saying: "The eye sees what it brings with it the capacity for seeing." Physiologically speaking, there is no separation between the processes of eye perception and mind perception, though they may work independently of one another. The eye is the waiting organ of the mind. But how perfectly it shall discharge its duties in this respect must depend upon the training it receives. (4) We should therefore seek to inculcate in our children habits of analytical observation. This is one of the fruits of careful eye-training. A child should be encouraged to "pull things to pieces intellectually," to turn facts inside out, to learn the "insides of things."

The writer does not hesitate to put forward the strongest claims on behalf of botany as a subject specially adapted for parental teaching. Plants are easily obtained, and their structure and growth may be studied *in situ*, whilst their immobile condition offers the fullest facilities for observing the interesting effects of associated growth. The cultivation of the art of drawing, which is so necessary and helpful an accompaniment to Nature-study, is greatly facilitated in the case of plants and, finally, it is perhaps hardly necessary to point out that the comparative simplicity of structure which characterizes plants in comparison with animals is a further and important point in favour of their selection.

The system of teaching adopted should combine three essential points—(1) accuracy; (2) thoroughness; (3) breadth of treatment. The third point does not imply diffusiveness, but simply the avoidance of narrowness in teaching. It is necessary that the endeavour should be made in directing the observation into the right channels to ensure that every idea inculcated should serve to fire a train of ideas in the mind of the child.

Mr Rowbotham urges that nature teaching should be included in the home curriculum.

DEPARTMENTAL NOTES.

Educational.

HINDU FEMALE EDUCATION.

A large number of the leading members of the native community of Calcutta met recently and appointed a Committee, consisting of Mr. Justice Gurudas Banerjee, Mr. Justice Saroda Churn Mitter, Dr. Rash Behary Ghose, and Mr. Norendra Nath Sen, to consider a scheme of female education on Hindu lines, and to submit their Report within a month.

EXPERIMENTS IN GERMAN SCHOOLS.

An interesting series of experiments has been tried by the school authorities in South Germany to test the faculty of observation, as it is exercised by boys and girls. A man dressed as an ordinary workman and with ordinary features was placed in a room by himself. Classes of girls of different ages were sent through the room. All that the teachers told them was that they were to go into the room through one door and out through another. When they returned to their class-rooms they were asked to describe the man in the room. Nearly 80 per cent. of the girls confined their attention to the man's clothes the others described both clothes and features. The same experiments when tried with boys revealed the fact that nearly 70 per cent. of them confined their attention to the man's features, the remainder to both features and clothes. The experiments have been tried with the object of fixing the force of evidence in cases where young people are called as witnesses to establish identity.

THE EDUCATION BILL.

GOVERNMENT'S SCHEME IN BRIEF.

The Government's Education Bill was introduced in the House of Commons on the 24th March by Mr. Balfour in a long and intricate speech. Briefly summarised the provisions are as follow :—

(1) One authority for Primary, Secondary, and Technical education.

(2) The proposed authority is to be the County Council in counties and the Borough Council in county boroughs. They will work through Committees appointed under schemes which will have to be approved by the Education Department. A majority of a Committee at least is to be appointed by the Council. The other members will be nominated and will be persons experienced in education.

(3) With regard to Secondary education the provisions of the measure are practically identical with those embodied in the Bill of last year. County Councils and Borough Councils will have a 2d. rate to work upon, and, as in many places that would be insufficient, power will be given to have that limit raised by provisional order.

(4) Whether the schools in a district are voluntary or rate erected, the local educational authority created by the Bill will in future be the absolute master over all secular education. It will be the heir of the School Board. The costs of maintaining the schools under the local authority will be thrown on the county rate.

(5) It is not proposed to deprive any borough with a population over 10,000, or any urban district with a population over 20,000, of the jurisdiction it at present holds. The Councils of these boroughs and urban districts may, if they choose, become the absolute authority over Primary education. They will retain their existing powers over technical education ; and they will become the authority for Secondary education concurrently with the County Council.

(6) The managers of voluntary schools will remain responsible for using their buildings for educational purposes, for keeping them in good repair, and making reasonable alterations. Where the real needs of a district require a kind of education not supplied by the voluntary schools in that district it is provided that new schools can be erected under reasonable limitations. Where there is a difference of opinion as to the need for a new school, the Education Department is to be the arbiter, and will take into consideration the interests of the education of the district, the burden that would be imposed on the rates, and the wishes of the parents of the children.

LONDON EXCLUDED.

In concluding his exposition of the Bill Mr. Balfour said the scheme was to apply to the whole country, with two important and, he hoped, transitory limitations. In the first place, London, which required separate treatment, was excluded from the operation of the Bill. Secondly, the Government recognised that their scheme might cause disgust and even alarm in some parts of the country ; and, as they could not hope to work it successfully without the co-operation of the local authorities, they proposed that the adoption of the elementary education portion of the measures should be optional.

Wales, which has a Secondary education authority already, is to be permitted either to retain that authority or to substitute for it the authority proposed in the Bill.

Literary.

MR. KIDD'S PHILOSOPHY.

Mr. Frederic Harrison contributes to the *April* number of the *Postivest Review* a very scathing criticism of Mr. Benjamin Kidd's new book on the "Principles of Western Civilisation" which he says is being much puffed by certain critics and pushed by the trade. Says Mr. Harrison:—

Principles of Western Civilization may serve to test the depth of imbecility which can now-a-days be reached by what is called philosophy. The public must have its philosophy at once vague, grandiloquent, transcendental, with much parade of evolutionism, and a grand scorn of anything utilitarian or democratic. But it rarely gets such a mass of sonorous fatuity as in this bulky collection of *Principles*. Pompous paragraphs about the "profound study of the evolutionist" have no meaning at all, except to express a verbose contempt for such feeble materialists as the Mills, the Benthames, Herbert Spencers, and all who share their antiquated pedantries. The real "evolutionist," who is neither Darwin, nor Huxley, nor Spencer—but Kidd—sees in futurity a new Heaven and a new Earth.

The one coherent idea which seems to emerge out of this misty jargon of pseudo-scientific metaphysic is the root-principle of the "evolutionist" that, whereas philosophers have hitherto applied the theory of evolution to the Past, and assert that the Present is its product, and that both Past and Present will ultimately form the Future, Mr. Kidd applies the theory of "evolution to the Future, and roundly asserts that the Present is under the control—not of the Past, but of the Future! That is Mr. Kidd's discovery. Of course, this is rank nonsense. The Future has not yet happened; but Mr. Kidd knows what it is to be. And this inspiring vision enables him to see the final value of things which our current morality and common-sense politics condemn as evil. Ultimate good will come out of present evil, as the Jesuits said. This is indeed a new view of the maxim—*Respiquo in eum*.

Mr. Kidd misunderstands and distorts the views of Mill and of Spencer, and speaks of Darwin almost as if he (Mr. Kidd) had discovered, the true doctrine of evolution, of which Charles Darwin had only a glimpse. One is glad to see that he does not allude to Comte or to Positivism, as he would not have understood either. This is curious; because no philosopher has so systematically treated of the Future as Comte does.

THE PROPOSED ACADEMY.

The idea of the establishment of the British Academy does not seem to 'catch on' as might have been expected by its projectors. One of Mr. Andrew Lang's friends at St. Andrews thus hits off the members of the new body: "A lot of dismal Johnnies have elected themselves, and got in on the ground floor."

IN DISPRAISE OF MATHEW ARNOLD.

Mr. F. Grierson contributes to the pages of the *Westminster Review* a depreciatory article under the title of "The Blunders of Mathew Arnold," wherein the apostle of light and sweetness has been accused of want of reason, judgment, and what not. The charges brought against him are thus summed up in a nutshell:—(1) that Arnold was not a man of the world; (2) that he was no psychologist (3) that he never knew the meaning of passion; (4), that he could not reason from cause to effect.

GOETHE'S BEST WORK.

Goethe's best work, indeed the most important single work in all modern literature is, "Faust." It is not only the greatest work of the greatest German poet, but also "the finest and richest expression of one of the brightest and grandest of lives." It is his life work. He conceived the plan as a youth of twenty and worked on it more than sixty years, taking it with him everywhere and finishing it only as the shadows of age and death were gathering thick and fast around him. Boyesen calls it "a rainbow bridge that spans his long and eventful career," revealing in brilliant colors the tumultuous passions of his youth the struggles and aspirations of his manhood, the wisdom of his serene old age." It is in every sense the fullest expression of the poet's life, the lesson, the legacy of that life. Bayard Taylor felt that "there is no other poem which, like this, was the work of a whole life and which so deals with the profoundest problems of all life."

Again "Faust" is the heart-history of a people, of an age, the revelation and interpretation of the character of that people and its ideals to itself. It thus embodies the genius of the German nation and the spirit of modern times. It is the "Divine Comedy" of Germany, and what the "Divine Comedy" was to the Renaissance "Faust" is to our own day. "Faust" goes even further: it is not merely the story of an individual heart-life, or of national aspiration, but of all life, of typical human life, of a noble human soul struggling out of darkness and doubt and despair towards clearer light and firmer faith and sweeter hope, of a soul intent on solving the profoundest problems of life and finding the noblest happiness and destiny.—From "Goethe's 'Faust,'" by Robert Waller Deering, in the *Charltonian*.

Legal.

THE YOUTHFUL OFFENDERS ACT.

This act which extends the lenient treatment of juvenile criminals, introduces a new element into parental responsibility. If youths under the age of sixteen are charged with offences for which a court of summary jurisdiction may impose 'a fine, damage, or costs,' their parents or guardians, if there is reason to believe that they have conduced to the commission of the alleged offences by wilful default or habitual neglect of their responsibilities, may be summoned with them, and ordered to pay 'the fine, damages, or costs,' and may also be required to give security for the good behaviour of their offspring or charges. This is not the only notable change which the Act introduces into the administration of the Criminal Law. The Court, instead of sending a youthful offender to prison, may commit him into the custody of 'any fit person' who is willing to receive him, 'due regard being had, where practicable, to the religious persuasion of the child.' Who are the fit persons who are willing to accept the custody of young criminals and what are the steps being taken towards their discovery, are questions which must remain unanswered for the present.—*The Law Journal*.

THE INDIA OFFICE.

The Hon'ble Mr. Justice H. H. Shephard, of Madras, has been appointed Legal Adviser and Solicitor to the Secretary of State for India in succession to Sir Arthur Wilson, who has been appointed to the Judicial Committee of the Privy Council.

KISSING THE BIBLE.

Mr. Justice Byrne, an American judge, recently took occasion to make some observations on the fact that on three occasions lately three witnesses in his Court had evaded kissing the Book on the administration of the oath to them, and had, instead, kissed their thumbs, or some part of their hands. He said that this was probably due to an idea that the practice of kissing the Book is liable to spread disease. He pointed out that under the English Act, 51 & 52 Vict., c. 46, S. 5: "If any person to whom an oath is administered desires to swear with uplifted hand, in the form and manner in which an oath is usually administered in Scotland, he shall be permitted so to do, and the oath shall be administered to him in such form and manner without further question,"—and he very properly observed that persons who objected on sanitary grounds to kissing the Book

cought to avail themselves of the statute and not make a pretence of going through the other form of oath. Some such statute should be adopted in Ontario, or the Scotch form of oath made the rule and the practice of kissing the Book abolished. As for those who think, by kissing their thumb, they evade the penalties of perjury, for false swearing, it is well known that the law gives no sanction to any such idea.

ADMISSION OF DOCUMENTS.

The following observations of the Bar-council in regard to the question of the admission of documents in evidence may be remembered by our lawyers with advantage.

(1) That in the opinion of the Council it is undesirable that Counsel should object to the admissibility of any document upon the ground that it is not, or is not sufficiently, stamped, unless such defect goes to the validity of the document.

(2) That it is undesirable that Counsel should take part in such discussion in support of the objection unless invited to do so by the Court.

SENIOR AND JUNIOR

It will be gratifying, says the *Oakville Weekly Notes*, to the junior members of the Bar if the senior members practising in the High Court will, by analogy, observe the following rules framed by the General Council of the Bar for the apportionment of work between King's Counsel and the Junior Bar.

(1) A King's Counsel should refuse all drafting work, and written opinions on evidence as being appropriate to Juniors only, but a King's Counsel is at liberty to settle any such drafting and to advise on evidence, in consultation with a Junior.

(2) (a) A King's Counsel, in accordance with a long-standing rule of the profession, cannot hold a brief for the plaintiff on the hearing of a civil cause in the High Court, Court of Appeal, or the House of Lords, without a Junior.

(b) It is the usual practice of King's Counsel to insist upon having a Junior when appearing for a Defendant in like cases, and also when appearing either for the prosecution or for the defence on trials of criminal indictments.

HUSBAND AND WIFE.

It has been held by the American Court of Appeal that the payment by a husband to his wife, with whom he is living, of an adequate allowance for dress and personal expenses, put an end to the wife's *prima facie* right to pledge as his agent her husband's credit for articles of clothing purchased by her.

Trade & Industry.

DESIGN LAYING.

This is the title of the latest booklet of the Useful-Arts and Handicrafts Series edited by H. Snowden Ward. It describes in simple language the methods of tracing, transferring, reversing, multiplying, enlarging, reducing, repeating, and fitting designs, for use on all kinds of fabrics and materials, and suggests useful tools, compasses, pentagraphs, hectographs, dividers, kaleidoscopes, etc, with diagrams and sketches, and six full-page plates.

THE IMPROVEMENT OF INDIAN HANDICRAFTS.

The current number of the *Indian Textile Journal* deals with the question of improvement in Handicrafts. The writer is not for the introduction of the English methods of work which are in so many cases diverse from those of the Indian, but advocates Japan as a good depot for the training of Indian craftsmen.

He observes that if instead of sending highly educated young students to England in search of the elusive secret of successful manufacture, the experiment were tried of sending highly intelligent young workmen to Japan to learn the practical details of certain handicrafts, such as cabinet-work, bamboo-work, brass-casting, weaving, special paper-making and hand-printing on tissues and on paper, including block-cutting and wood-carving, it is probable that they would return with a vast stock of knowledge and experience that could be immediately turned to account among their fellow-countrymen here. Their chief qualification would be a training in their own trade and a knowledge of freehand drawing and of reading and writing in addition to the special intelligence which would mark them out for selection. The treaty just concluded with Japan will ensure to British subjects a hearty welcome in that country, and we find on enquiry that trade jealousies are not likely to interfere with foreign students in Japanese workshops as they often do in England.

INDIAN MECHANICAL ABILITY.

Mr. H. O. Richards, M. P., bears the following testimony to Indian mechanical ability:—"What the native of India lacks is technical training. Once trained he can do good work. Perhaps the best proof of what can be done is the development of the leather industry at Osnaburgh, where some of the most magnificent leather-work. I have seen outside Great Britain is prepared and sold at cheaper rates than we should find in a London wall or Woodstreet warehouse. We must encourage native industry. India is too much dependent on agriculture."

A BUREAU OF AGRICULTURE IN THE PHILIPPINES.

An Insular Bureau of Agriculture has been established in the Philippine Islands by the United States' Government in order to remedy the deplorable condition of agriculture there, and Professor F. Lamson Scribner, an accomplished botanist, who for nearly eight years has been a grostologist of the American Department of Agriculture, is appointed chief with headquarters at Manila. The current annual report of the American Secretary of War, states with reference to the Philippines, that "the method of cultivation are primitive and ineffective; the ordinary vegetables, notwithstanding the fertility of the land, are small and poor, and the stock is evidently run out and should be renewed. Many grains which are unknown to the people can undoubtedly be raised. They live chiefly on rice, and raise less than they consume." The main object of the new bureau is "to promote the development of the agricultural resources of the archipelago," and it will take charge of and conduct the model farms and experiment stations which were established in a number of provinces under the Spanish regime. In view of the agricultural importance of the islands, and the great opportunities for development along many different lines, the field for research and economic work is considered to be exceedingly attractive, and it is anticipated that in course of time the bureau will develop into one of the strongest and most useful branches of the Insular Government.

CIGARETTE MANUFACTURE.

The following remarks occur in the Review of the Trade of India for 1900-1901.

There was a large expansion in chemicals and in drugs, prominent under the latter head being tobacco, which represent more than a third of the whole imports. This trade attained a value of 38 lakhs in the year, an unusually high figure. Formerly, the importations were for the use of the European and Europeanised population exclusively; but this is no longer the case, some section of natives in the larger towns having taken to the habit of cigarette-smoking in supercession of *bukka* smoking. The value of cigarettes was about 45 per cent of the whole value of imported tobacco and it seems probable that it must continue to increase unless indeed local manufacture is established to compete with the imported article. As imported cigarettes were represented by a value last year of 17 lakhs of which perhaps half may be assigned to the native consumption of common cigarettes, it would seem that there is a fair prospect for cigar manufacturers in India to enter upon this enterprise.

Medical.

HOW TO STOP A COUGH.

Constant coughing, says *Science Sisters*, is precisely like scratching a wound on the outside of the body. So long as it is done the wound will not heal. Let a person when tempted to cough draw a long breath and hold it until it warms and soothes every air cell, and some benefit will soon be received from this process. The inhaled air acts as an anodyne to the mucous membrane, allaying the desire to cough, and giving the throat and lungs a chance to heal. At the same time, a suitable throat lubricant will aid nature in her effort to recuperate.

CONDENSED MILK.

The *Family Doctor* thus explains why boiled or condensed milk is not so nourishing as unboiled milk. It is not in the albumen, fat or sugar, but in the albuminates of iron and phosphorus and perhaps also of fluorine that the vital changes take place. These Albuminates are certainly in the milk and are present in a vitalised form as proteids. On boiling the change taking place is simply due to the coagulation of the globulin or proteid molecule which splits away from the inorganic molecule, and thus renders it as to the iron and fluorine unabsorbable, and as to the phosphorus molecule unassimilable. As a result, it is said, there is defective nutriment in boiled milk for the formation of bone and teeth, a most serious defect in the case of growing infants fed only on a milk diet.

CURE FOR HICCOUGH.

A young girl suffered for four days without cessation from singultus, about thirty spasms to the minute, the attack being due, apparently, to some gastric disorder. When she put out her tongue for a few seconds it was found the hiccough ceased. She was then ordered to stick out this member at regular intervals for a few minutes, at the termination of which only a few slight spasms followed. She was then ordered to repeat, when the singultus ceased altogether, and did not again return. It therefore would seem to be proper to try continuous or rhythmic traction of the tongue in these cases.—*Health*.

A REMEDY FOR SMALL-POX.

A surgeon of Nice, Mr. Pietri, suggests the use of beer yeast for small-pox. He states that men of 40 years of age, who had not been vaccinated since infancy, were cured of confluent small-pox, and preserved from subsequent

disfigurement, by the administration of five or six table-spoonfuls of the yeast daily.

MEDICAL TREATMENT IN AFGHANISTAN.

Dr. Gray, in his work "At the Court of the Amir," thus describes treatment for various maladies pursued in Afghanistan:—"For fevers, dyspepsia, gout, headache, or any feeling of malaise, the barbers bleed their patients; but besides, these, which may be called the irregular bleedings, there are regular bleedings every spring and autumn. These are generally done out of doors by the roadside. The barber, squatting down by the side of his patient, makes his incision at the bend of the elbow: fortunately, not into the vein immediately over the great artery of the arm, the one usually bled from in England, but into one adjoining. The patient holds out his arm, and allows the blood to drip on to the ground till he thinks enough has run away. There is not the slightest attempt made to measure the quantity of blood lost. The only precaution taken is to avoid drinking any water for twenty-four hours afterward, lest it should mix with the rest of the blood in the vein and make it thin, or, if they do drink any, they hold the wounded arm above their heads to prevent the water running into it."

SICK HEADACHE.

A Correspondent communicates to the *Health*, a well-known weekly medical journal, a remedy he has discovered for sick headache, and nausea which has, he says, proved most successful. It consists of simply cooling by means of ordinary cold water the back of the neck and rear base of the brain—the seat of trouble being there rather than where it is supposed to be, in the stomach. In a case of severe (bilious) headache, the sufferer is recommended to bend over a sink or basin and have some one pour over his occipital bone and back of the neck a gentle stream of cold water. Relief is promised within three minutes time. When the patient is in bed, and the method described impracticable on that account, ground ice done up in a cloth may be applied to the base of the brain. The correspondent says he succeeded by this plan in allaying headache pains and inducing quiet slumber in one whose disease was stomach cancer, and who had not obtained sleep for several nights because of the suffering in her head. Every repetition of the treatment too, gave similar results until the cancer finished its deadly work. Theoretically, the treatment is that of cooling the nerve centres and thus deadening sensation.

Science.

PROFESSOR BOSE ON PLANT LIFE.

REMARKABLE EXPERIMENTS.

At the invitation of the President, Professor J. C. Bose gave a lecture before the Linnean Society. The following notice of the lecture appeared in the *Electrician* of the 27th March:—"Professor Bose read a paper before the Linnean Society on the 20th March on the above subject (Electric Response in ordinary plants under Mechanical Stimulus), illustrated by experimental demonstrations. A perfect parallelism, which extended through all details, was shown to exist between the response in the animal and plant tissues. Just as in animal responses three types were exhibited in plants: (1) responses exhibiting no fatigue as in nerves, (2) responses exhibiting fatigue and (3) those which showed "staircase effect." "Swaying of the tree by wind gave rise to a radial E. M. F. the current flowing inwards. Ineffective stimuli when superposed became effective. The influence of maximum and minimum temperature was shown. There was no means hitherto available by which the exact death-point of a plant could be accurately determined, but by the electrical method this can be found with very great exactitude. Hot house plant showed abolition of response at a few degrees below 0°C , whereas the response of holly and ivy did not undergo any diminution even after prolonged exposure to freezing temperature. The higher limit, was generally speaking, found to be about 50°C , after which the responses were abolished with the death of the plant. This method also rendered it possible to determine the optimum temperature which was most favourable to plant's physiological activity. The influence of anaesthetics in producing waning of response was exactly the same as the effect produced on animal tissues. The killing action of various poisons was also demonstrated by the rapid decline and final abolition of response. The President in drawing attention to this important step in advance in the study of plant-physiology remarked that the question had interested him for many years. These experiments made it clear beyond doubt that all parts of plants—not merely those which are known to be metile—are irritable, and manifest their irritability by an electrical response to stimulation. These results will be the starting points for further researches to elucidate what is the nature of the molecular condition which constitutes irritability, and the nature of the molecular change induced by stimulus. They will lead to important generalisations as to the properties of matter, not only living matter but non-living matter as well."

NAVIGABLE BALLOON.

M. AUGUSTE E. GAUDRON has read a paper before the Aeronautical Institute and Club on the progressive improvements of the navigable balloon from its inception in 1852 to date. Giving credit for the first practical design to Henri Giffard, who made his experiments in 1852, the lecturer dealt also in detail with the demonstrations of Dupuy de Lôme in 1870, Gabriel Yon in 1880, the Bros. Tissandiers in 1881 (who introduced electricity as a motor power for balloons), and with the successful ascents made by Messrs. Renaud and Krebs in 1884. M. Gaudron did not express himself favourably in regard to the attempts of Kerr Schwarz in 1898 to produce a metallic balloon, declaring that all such designs were doomed to failures owing to the liability to fracture upon coming to earth. For a similar reason he discounted the merits of the Zeppelin airship of 1900, where stiffening was attempted by means of a lattice framework of aluminium. In conclusion, the lecturer instanced the demonstration at the Alexandra Palace in 1898 as the only occasion when a navigable balloon has been experimented with in public in this country. M. Gaudron was in charge, but the day was windy and the motor not working well, consequently the results were not all that could be desired.

ACID RAIN.

According to a recent consular report a remarkable phenomenon occurred last year in Naples, and in the neighbourhood generally of Vesuvius. This took the form of rain which was charged so heavily with hydrochloric acid that considerable damage to vegetation was the result. The volcano is always pouring out from its summit a cloud of steam, and it is known that this vapour is charged with acid exhalations; but there seems to be no previous record of this acid contaminating the rainfall. The phenomenon lasted for about a month in the spring of last year, and during this short period the leaves and buds of the sprouting vines were caused to shrivel up, and had the appearance of being burnt. The cereals grown in the villages adjacent to the mountain also suffered severely from the acid rain, and the mischief reached as far as Palma, near Nola, where hazel-nuts are grown in large quantities for export. These nut-plants were practically ruined, all the young shoots being destroyed. By an old law sufferers from volcanic action can get a remission of part or even the whole of the land-tax, and there are many applicants for relief on account of this acid rain:—*Chambers's Journal*.

General.

THE INDIAN FAMINE UNION.

The following resolutions were adopted at the public meeting held in the Memorial Hall, London in the 15th ultimo, under the auspices of the Indian Famine Union.

"This Conference deplores the continued prevalence of famine throughout vast regions in India, the permanent poverty of great masses of the people, the widespread indebtedness of the agricultural population, and the lack of precise official information regarding the foundation causes of agricultural distress, and is of opinion that it is urgently necessary that detailed local enquiry should be made into the economic conditions of typical villages in the famine areas, with a view to ascertaining the facts upon which preventive as well as remedial measures suited to the various provinces may be safely based."

"This Conference, whilst approving of the recommendation of the Famine Commission to substitute elasticity for rigidity in the collection of the land revenue, is of opinion that until the change of system is fully operative, when crops fail from drought, revenue paying cultivators should receive liberal remissions, and that, when necessary, advances should be freely made to them at low interest for the purchase of seed, food, and plough cattle,"

"That, looking to the cultivator's need of capital for current operations, and the paralysis of agricultural industry caused by his excessive indebtedness to the village money-lender: and looking to the recommendations of the Special Commissioner and the Committee, appointed to report on agricultural banks, the members of this Conference urge the Government to vigorously stimulate carefully devised local experiments in establishing such banks, and by liberal help on the lines approved by Lord Cromer in 1884, to effect the settlement of old debts, and thus give free scope to the cultivators' industry and enterprise."

"This Conference is of opinion that the backward condition of skilled industrial labour in India results in a large annual drain upon her financial resources, and is one of the main causes of the helplessness of her population to grapple with the hardships of scarcity and famine; and that therefore it is incumbent both upon the Government and the people to adopt such educational and other methods as may ensure the development of technical and industrial instruction throughout the country with a view to promote the productive power of her inhabitants."

"This Conference is of opinion that it is incumbent upon the Government to adopt such methods as may en-

sure the development of indigenous arts and technical industries throughout India."

"This Conference regrets the small and inadequate amount set aside each year by the Indian Government for irrigation works, and is of opinion that the larger expenditure and wider policy should be adopted, as recommended by the Famine Commission, which would place irrigation works in the place that protective railways hitherto occupied in the Famine Insurance programme, with special attention to smaller protective works in the direction of storage tanks, reservoirs, and irrigation wells."

PETITION TO PARLIAMENT.

That this meeting, having under its consideration the present condition of the Indian people, deplores the continued prevalence of famine throughout the vast regions of India, the permanent poverty of great masses of the people, the widespread indebtedness of the agricultural population, and the lack of precise official information regarding the foundation causes of agricultural distress; the small inadequate amount set aside each year by the Indian Government for irrigation works; the paralysis of agricultural industry caused by the excessive indebtedness of the cultivator to the money-lender; and the backward condition of the skilled industrial labourers in India, all of which contributed largely to the helplessness of the population to grapple with the hardships of scarcity and famine:—

Therefore, this meeting humbly prays your Honourable House to resolve as follows *vis.*,:—

That the Government of India shall order a detailed local enquiry into the economic conditions of typical villages in the famine areas, with a view to ascertaining the facts upon which preventive as well as remedial measures suited to the various provinces may be safely adopted.

That effect shall immediately be given by the Government of India to the recommendation of the Famine Commission to substitute elasticity for rigidity in the collection of the land revenue; and further, that, pending such change in the land system, when crops fail from drought, revenue-paying cultivators should receive liberal remissions, and that, when necessary, advances should be freely made to them at low rates of interest for the purchase of seed, food, and plough-cattle.

That carefully devised local experiments shall be undertaken by establishing agricultural banks, and by liberal help on the lines approved by Lord Cromer, in 1884, to effect the settlement of old debts, and thus give free scope to the cultivator's industry and enterprise: . .

That such educational and other methods shall be adopted as may ensure the development of technical and industrial instruction throughout the country with a view to promote the productive power of her inhabitants.

And especially to adopt the larger expenditure and wider policy as recommended by the Famine Commission which would place irrigation works in the position that protective railways have hitherto occupied in the Famine Insurance programme, with especial attention to smaller protective works in the direction of storage tanks, reservoirs, and irrigation wells.

THE OLDEST MAN IN THE WORLD.

Noah Raby, who is believed to be the oldest inhabitant of the earth, has celebrated the 130th anniversary of his birth. Raby is an inmate of the poor-house, near New Brunswick. During the past year he has been growing perceptibly more feeble, and the steward of the institution some days ago informed the old man that his birth day reception would be dispensed with this year. Noah, however, despite his age, has a will of his own, and he refused to eat or to obey any request until a promise was made him to observe his birthday as usual. Raby is blind and toothless, but his memory still remains clear.

FRANCE HONORS PROF. BOSE.

Professor J. C. Bose has been elected to the Council of the Societe Francaise de Physique. He was invited to Paris to deliver a course of lectures on his new discoveries. The first lecture was given before the Societe de Physique, the second at the Sorbonne, and the third before the Societe de Zoologie. The International Congress of Science held in Paris has published in their Transactions a full account of Professor Bose's researches on "Phenomenes Moleculaires sur la Matiere Inorganique et sur la Matiere Vivante."

MADRAS, BOMBAY AND THE INDIA OFFICE.

In reference to the protest that was published recently against the Government of India's proposal to deprive the Governments of Madras and Bombay of the right of direct access to the Secretary of State in Council, we learn, on reliable authority, that after calling for and considering the reports on the subject of the Local Governments concerned, Lord George Hamilton has vetoed the proposal to deprive them of their independence. This decision has been conveyed in a form which renders it unlikely that the question will again be raised for many years to come. Both Lord Northcote and Lord Ampthill are to be congratulated upon the success of their vigorous defence of the rights and privileges of their respective Presidencies.

GREAT MEN FROM THE HUMBLER CLASSES.

Lord Avebury, addressing the students of the L.C.C. technical classes, instanced a number of great men who rose from the humbler classes:—"The famous naturalist Ray, was the son of a blacksmith, Watt of a shipwright, Franklin of a tallow chandler, Dalton of a handloom weaver, Fraunhofer of a glazier, Laplace of a farmer, Linnaeus of a poor curate, Faraday of a blacksmith; George Stephenson was a working collier, Davy, an apothecary's assistant, Wheatstone, a musical instrument maker; Boulton, 'the father of Birmingham,' was the son of a button maker; Galileo, Kepler, Sprengel, Cuvier and Sir W. Herschel were all children of very poor parents."

POPULATION OF THE EARTH.

The total population of the earth is estimated at over 1,500,000,000. The distribution is thus proportioned Europe, 372,925,000, or 99.66 per square mile; Asia, 830,558,000, or 48.57 per square mile; Africa, 170,050,000; or 14.77 per square mile; America, 132,718,000, or 8.96 per square mile; Polynesia, 6,000,000 or 1.73 per square mile; polar regions, 82,000, or .05 per square mile; total, 1,512,333,000, or an average of 28.89 per square mile.

IRRIGATION IN INDIA.

Speaking on the subject of irrigation during the recent Budget debate, Mr. Ibbetson, who until a few weeks ago was one of the members of the Irrigation Commission let fall the following interesting remarks:—"I cannot pretend to foretell what the recommendation of the Irrigation Commission will be, but I shall be surprised if they do not result in the expenditure, on definite and systematic lines, of much larger amounts than hitherto upon irrigation works, protective, as well as protective. I hope also that they will provide us with a final and conclusive answer to those who tell us that because, taking one year with another, the rain that falls in India is sufficient for agricultural purposes, therefore it is possible and our duty, so to store and utilise the surplus as to render failure of crops impossible. That very much more can be done than has been done is a commonplace; that it is our duty to do very much more and that without delay is my conviction; but that is even physically possible—and still less is it possible by any expenditure of money which a sane Government could contemplate—to secure the whole, or anything like the whole, of India against famine, I hold to be a delusion of the deepest dye."

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THE Editor solicits contributions on all topics of general interest, and in particular on subjects bearing on the commercial, industrial and economic condition of India. Contributions accepted and published will be duly paid for.

It may be stated that a page of the Review takes in about 730 words.

All contributions, books for Review should be addressed to Mr. G. A. Natesan, Editor, The Indian Review, Esplanade, Madras.

Notice to Subscribers.

IT is particularly requested that any change in the address of the subscribers may be early intimated. Complaints of non-receipt of particular issues of the Review received after the month to which they relate will not be attended to, and such, as well as old numbers of the Review will be charged for at eight annas a copy.

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The end of the War.

The first day of this month put an end to the sad struggle which has been going on in South Africa for over two years and a half and the news that peace was concluded between the British and the Boers has been received with feelings of immense satisfaction all over the civilised world. Throughout the whole British Empire there is special satisfaction that the disastrous war has been brought to an end on the first day of the month in which His Majesty King Edward will be crowned. The terms of peace are thus briefly stated.

- (1) The Burghers are to lay down their arms.
- (2) The prisoners are to be brought back without loss of liberty or property.
- (3) No action is to be taken against the prisoners, except such as are guilty of breaches of the laws of war.
- (4) The Dutch (Boer) language is to be used in Schools and Law Courts.
- (5) The Boers are to retain their rifles for the protection of their life and property.
- (6) No tax is to be levied on the Transvaal on account of war payments.
- (7) Three millions sterling is to be provided for the re-stocking of farms.
- (8) The rebels are to be punished according to the law of their Colony. The rank and file are to be disenfranchised for life. There is to be no death penalty.

It is also stated that circumstances will determine, when representative institutions leading to self-government can be introduced. Thus it will be seen that the Boers have lost that for which rightly or wrongly they most heroically fought and Providence has to-day placed the political freedom of this simple, and brave band of farmers in the hands of the great English people. It will serve no useful purpose at this moment to rake up the causes of this horrid war between these two great christian nations—a war which has caused both the parties a tremendous loss of life and money,

a war which has added enormously to the national debt of Great Britain, a war which gave Britain's enemies an opportunity to sneakingly rejoice over their temporary reverses and losses, and a war which has ultimately made many of the Boers homeless and helpless. Nothing else but the honest and scrupulous observance of the terms of peace by either side will atone for the shedding of the enormous christian blood which this war has entailed. They who till recently were the bitterest foes of Great Britain have now become its honourable allies, and we have no doubt that the Britain will treat the Boer with all consideration. Magnanimity, true magnanimity is what is wanted. Lord Milner himself observed only the other day.

“ When I say that, do not think that I wish to join in the outcry, at present so prevalent, against the fine old virtue of magnanimity. I believe in it as much as ever I did, and there is plenty of room for it in the South Africa of to-day. We can show it by a frank recognition of what is great and admirable in the character of our enemies; by not maligning them as a body because of the sins of the few, or perhaps even of many individuals. We can show it by not crowing excessively over our victories, and by not thinking evil of everyone who, for one reason or another, is unable to join in our legitimate rejoicings. We can show it by striving to take care that our treatment of those who have been guilty of rebellion, while characterised by a just severity towards the really guilty parties, should be devoid of any spirit of vindictiveness or of race prejudice. We can show it, above all, when this dire struggle is over, by proving by our acts that they libelled us who said that we fought for gold or any material advantage, and that the rights and privileges which we have resolutely claimed for ourselves we are prepared freely to extend to others, even to those who have fought against us, whenever they are prepared loyally to accept them.”

The sentiment is English and we may perhaps appropriately recall at this moment the words of a great English soldier who himself played no

mean part in the great war recently ended. We refer to the words uttered by Lord Roberts in his farewell speech at Cape Town.

"I shall watch with the utmost eagerness the settlement of the country, its development, and its unification and on this head I would crave permission to say a few words. The prosperity and well-being of South Africa do not depend upon the action, the ability or the governing power of any one man, so much as upon the cordial co-operation of the various nationalities by whom it is inhabited. The Dutch and the English must work together without the distinction of race, religion or sentiment, if they wish to see this country contented and flourishing and it will be my proudest boast if I can claim to have done nothing under the stress of war's stern necessities, to hinder the friendly feeling which I trust may be established between the two races or prevent their hearty co-operation in their efforts for the good government of the Transvaal and the Orange River Colony."

"We must forgive and try to forget all that would encourage bitterness of feeling or tend to transmit to succeeding generations the idea that anything remains to be atoned for on either side.

"Nor must we neglect the lessons that the war has taught us.

"God has given into our hands a great heritage for which we have been called upon to pay a heavy price in the blood of our dearest and our best.

"We must not in the future be negligent of our trust as we have been in the past. We must strive to be able, when called upon to give a good account of our stewardship. We must be watchful, strong and of a good courage; and we must try to think not so much of the glory of conquest, as of the many responsibilities conquest imposes upon the conquerors, lest we forget that which alone makes war justifiable and conquest laudable—the good of the many, the better Government of the conquered country, and the establishment within its borders of justice, mercy, liberty and truth."

Cuba's Independence.

Those that viewed with suspicion, four years ago, the action of the United States in meddling with the war between Spain and Cuba will now see how uncharitable they have been to the great American Republic. Verily "cynics who refused to believe that the troops which landed at Santiago four years ago would ever leave the island have been triumphantly confounded." On the 20th of last month Cuba was declared free and to-day she is an independent republic with a free constitution. She is however prohibited from ceding land or giving privileges to foreign powers, she is required to sell or lease "coaling or naval stations" to the United States, her borrowing powers are limited to the capacity of her ordinary revenues, and she is to carry out such measures of sanitation as may be agreed upon. Furthermore, the United States may intervene for the preservation of Cuban independence, the maintenance of a government adequate for the protection of life, property, and individual liberty, and for discharging the obligations imposed by the treaty of Paris. These reservations need hardly be grudged. The behaviour of the United States points to a "disinterested magnanimity without a parallel in history" and is certainly in keeping with the love of freedom and justice that is traditionally associated with the foundation and the building up of the great American republic. The announcement recently made by President Roosevelt that the people of the Philippine islands, on being free from the yoke of the Spaniard, will be granted independence as soon as they have demonstrated their capacity for self-government raises fresh hopes that America "will yet rise to the height of her own moral dignity."

Those that have not as yet paid their subscription for the current year are requested to make an early remittance. If so desired, the next issue will be sent by V. P. P.

The Proposed Commercial Bureau.

The announcement made by the Government of India that with the concurrence of the Secretary of State it is proposed to form a "Bureau of Commercial Intelligence" in connection with the Department of finance and commerce has received the approbation of the public. In a circular dated the 20th May, the outlines of the scheme are thus indicated:—

At the head of the new Bureau in all its branches there is to be a specially selected officer, entitled Director-General of Commercial Intelligence. Under his direct orders are to be placed two Assistants, one of whom will be styled Director of Statistics, and the other Director of the Commercial Branch, together with the necessary establishment. The primary function of the Director-General and of the Commercial Branch Assistant under his orders, would be to procure, compile, and publish, all information likely to be of use to the commercial public, or to the Government in its relations to commerce. This would embrace matters relating to both import and export trade, to the inland and trans-frontier trade, to the industrial and mineral resources of the country, to the competition of foreign staples with local products in India, and of Indian staples with foreign products abroad, to the development of existing markets, and the discovery of new ones.

With a view to procure this information the Director-General and his Assistant are expected to be constantly and regularly in communication with Chambers of Commerce, Industrial and Trade Associations, Shipping Companies, Labour organisations, and representatives of the chief industries in all parts of India; with the Board of Trade and Commercial Associations in the United Kingdom and with similar bodies, official and commercial, in British possessions over sea; and with British Consular representatives in foreign countries and dependencies.

The main object of the commercial bureau being the dissemination of the information thus collected to the public, the Government of India suggest that the Director-General should have three principal channels. In the first place his office would contain a library of carefully arranged information in books, reports, pamphlets, notes and maps; and this should be at the disposal of the public. Secondly, an important branch of the bureau would consist of an "Enquiry Office," in which all information not readily available in the library would be arranged, registered, carefully indexed, and brought up to date and given to the public. Thirdly, information suitable for publication would be issued in a periodical journal.

It is proposed that the Director-General should have his headquarters at Calcutta; but he would be required to visit the other chief ports and large inland centres of trade at convenient intervals.

The idea of the Commercial bureau is excellent and the main outlines are all right on paper. But its utility will depend on the officers selected to carry out the scheme and the primary aim with which it is worked. It is apprehended in many quarters that the appointment of civilians to the proposed offices would defeat the object in view as they will lack the commercial training and business experience required for the due discharge of their functions. A contemporary has gone so far as to suggest that the services of some competent Americans should be sought after, as in the United States, the bureau of Commercial Intelligence has long been working in a highly efficient manner. It is also apprehended that the proposed bureau of commerce may prove to be a junta of Anglo-Indian monopolists.

This is a needed warning and it is to be hoped Lord Curzon will try as far as it lies in his power to establish the Commercial Bureau and arrange for its working on such lines as would contribute to the genuine interests of the Indian people.

Lord Stanley.

The announcement that Lord Stanley of Alderley has been offered and is likely to accept, the Presidentship of the Indian National Congress to be held at Ahmadabad in the coming December has met with the unanimous approval of the Indian press and the public. Lord Stanley is one of the few English noblemen who have been steadily taking a deep interest in Indian affairs. He has constantly pleaded in parliament for justice to India. It was only last year that he sent a cheque for a hundred pounds to constable Narsing, the victim in the now notorious Chapra scandal and we owe to Lord Stanley's pecuniary help an interesting blue book on the vexed question of the separation of the executive and judicial functions.

The Late Mr. R. M. Sayani

In the death of Mr. R. M. Sayani, the well-known solicitor, Bombay has lost one of her esteemed citizens and the progressive Indian political party, a valued Mussalman co-adjutor. Mr. Sayani was born in 1847. He took his degree in the University of Bombay in 1866. Early in life, he interested himself in public matters. For over 25 years, he occupied a seat on the Bombay municipal corporation, was elected sheriff of the city in 1884 and later on had the honor of being elected to the Imperial council to represent the Bombay Presidency. He took a great deal of interest in education and as member of the Syndic of the University of Bombay, advocated advanced views on questions of university reform. In 1896, he presided over the twelfth National Congress at Calcutta and from his Presidential chair invoked his countrymen to recognise the oneness of interest between the Hindu and the Mussalman and to work shoulder to shoulder for the common welfare.

Enthronement of the King of Spain

On Saturday, May 7th Alfonso XIII was duly enthroned king of Spain with all the brilliant pageantry of a royal coronation. It is worthy of notice, that the young king, enjoys the unique distinction in modern history of having been born a king. Indeed "his baby fingers have played with the sceptre from the very moment of his birth." Alfonso XIII is described as a promising young sovereign with a will of his own and it is stated to be likely that he will change most of "the ideas and currents that now cross the political life of Spain." The cordial welcome which the young king had at the hands of the congress when he recited the oath of enthronement before that body and the loyal and enthusiastic cheering which his capital city gave him on the day of the coronation testify to his great popularity among his people. All honor and credit to the Maria Christiana, who for the period of sixteen years she acted as Queen Regent has been zealously training her young son to conduct himself worthy of his royal position.

At this moment the industrial struggle in Spain is very acute and as in some other European countries the anarchist party is proving itself a real danger to the state, as was evidenced by a little incident on the occasion of the enthronement. King Alfonso XIII will find that the royal throne is not quite a bed of roses and it is to be hoped that the crowds in the street "which vied with their Parliamentary representatives in their acclamations as the king left the congress" prayed for "a long and everbrightening record of loyal co-operation between the sovereign and his subjects, of re-awakened national energies, and of solid and enduring gains of domestic unity and progress."



THE HINDU IDEA AND CEREMONY OF CORONATION.

THE primary meaning of the term coronation is to signify the solemnity of crowning a king. It has however come to mean generally all that constitutes the act of publicly and religiously installing a person as sovereign and of investing him with the insignia of royalty, the crown being frequently an important item among those insignia. It is evident that the institution of coronation must be nearly, if not quite, as old as the institution of kingship itself. In the history of many communities the origin of kingship is lost in a far away mythological antiquity, wherein the king is seen to be clothed in divine majesty and splendour and is conceived to be pre-eminently the favoured child of the gods. Modern philology recognises distinctly the equivalence of the English word *king* with the Sanskrit word *janaka* which means *father*; and the affinity between these two words is of interest in the way of showing to us that kings have been really evolved out of the patriarchs of early tribal communities. Thus the ceremony of coronation goes back even to the commencement of tribal life and civilisation in the history of man, and it is well known that the assumption of power by the tribal chief and the recognition of his chiefship by the tribe were both accomplished in orderly tribal life by the chief performing, in the presence of the assembled tribe, certain ceremonies of a mainly religious character. The chiefship of the patriarch related to the religious as well as to the secular affairs of the tribe over which he exercised authority; and tribal religious worship being largely of a communal character, the patriarch was in himself both the King and the High Priest of his tribe. In the process of the evolution of the king out of the patriarch, it is easy to notice that the secular sovereign became gradually differentiated from the religious priest, the former representing

human and earthly power and the latter representing superhuman divine power. The question as to which of these two representatives was superior to the other seems to have engaged the attention of kings and priests in very early times, so that the problem concerning the relation of the Church to the State, as it is now commonly expressed, is in no way a peculiar feature of modern history. The struggle between the power of the state and the power of the priest did not give rise to the same result in all ancient civilisations: in some of them victory was on the side of the state, while in others it fell to the lot of the priest. Anyhow in the ceremony of coronation the priest has always had an importance attached to him; for, without his invocation of divine sanction and divine blessing, the power of no earthly potentate is even now considered to be capable of manifesting itself as well founded and auspicious.

The early predominance of the priestly power in ancient Indian history makes the study of the ceremony of coronation among the Hindus particularly interesting. Kings and principalities are very well known to ancient Indian literature, which also recognises the existence of powerful non-Aryan sovereigns in the land. The early struggle between the military aristocracy and the priestly aristocracy among the ancient Indian Aryas in regard to the privilege of officiating in religious sacrifices is well enough brought out in the following passage from the *Aitareya Brahmana* (VII. 4. 1.):—

"Prajapati, the Lord of Creatures, created the sacrifice. After the creation of the sacrifice, *brahma*, i.e. religious knowledge and power, and *kshattra*, i.e. military heroism and power, were created. After *brahma* and *kshattra* two kinds of creatures were created—those that eat what has been offered in sacrifices and those that eat what has not been so offered. The eaters of sacrificial offerings followed the *brahma* power; and those that ate what was not offered in sacrifices followed the *kshattra* power. The Brahmins are these persons who are the eaters of the sacrificial offering, and then those who eat what has not been offered in sacrifices are the Rajanyas, the Vaisyas and the Sudras. The sacrifice went away from them. The *brahma* power and the *kshattra* power pursued it. The *brahma* power went in pursuit with whatever constituted its weapons, and the *kshattra* power with what constituted its weapons. They are indeed the

weapons of the *brahma* power—those which form the implements used in sacrifices; and then these are the weapons of the *kshattria* power, namely, the horse, the chariot, the armour, the arrow and the bow. The *kshattria* power returned without getting at the sacrifice, for it ran away being afraid of the weapons of the *kshattria*. The *brahma* power which followed the sacrifice got at it, stopped it from running away and stood firmly. Having been so got at and being so stopped from running away, the sacrifice recognised its own implements (as forming the weapons of the *brahma* power) and went to the *brahma* power. It is indeed therefore that the sacrifice is well established within the *brahma* power and in Brahmins. Then the *kshattria* power went to the *brahma* power and said—'Introduce me into the sacrifice.' It said (in reply)—'Yes, I shall do so; however, for that purpose you put away your own weapons and approach the sacrifice with the weapons of the *brahma* power, in the form of the *brahma* power and becoming yourself the *brahma* power.' Saying 'Yes' to this, the *kshattria* power put away its own weapons, and with the weapons of the *brahma* power and in the form of the *brahma* power it approached the sacrifice. It is indeed therefore that the sacrificer who is a Kshatriya necessarily lays aside his own weapons and approaches the sacrifice with the weapons of the *brahma* power and in the form of the *brahma* power, himself having become the *brahma* power."

This extract shows to us how in very early times it became evident in India that the military temper of the Kshatriya was incompatible with the character and functions of the sacrificial priest. The warrior that fights and slays cannot easily play anywhere the part of the priest that blesses and saves. Moreover, the power of the warrior himself stands in need of being blessed and consecrated by the priest; for, it has long been understood, and rightly, that here on earth no power can be enduring and helpful to man which has not been sanctified by that sense of responsibility, which is due to the conviction that all power comes from divine sources, and is really upheld by nothing so well as by justice and truth. Although the king is indeed the great man in the ceremony of coronation, the ceremony itself seems to have been intended to teach him humility and to impress him well with the sense of his great and serious responsibility. That this is so may be learnt from an examination of the *Rajasuya* sacrifice of the Hindus. The very name of this sacrifice indicates that it is one which, as it were, gives birth to the king; and it seems to have been the earliest form of a well organised ceremony of coronation known to Indian literature and Indian

history. There is an interesting passage in the *Brihadaranyaka-Upanishad* relating to the position of the king in the *Rajasuya* sacrifice, for quoting which here no excuse is needed. It is as follows (I. 4. 11—14.):—

"Verily in the beginning all this was *Brahman*, one only. That being one, was not competent to flourish (here). It created as other (than itself) the *kshattria* power in an excellent form and those *kshattras*, (or heroic powers) among the gods, namely, Indra, Varuna, Soma, Rudra, Parjanya, Yama, Mrityu and Isana. Therefore there is nothing higher than the *kshattria* power; and therefore it is that in the *Rajasuya* sacrifice the Brahmin sits below the Kshatriya and renders obeisance. He bestows that (Brahminical) glory on the *kshattria* power itself. That which is the *brahma* power is (however) the source of the *kshattria* power. Accordingly, although the king attains supremacy, he in the end resorts for support to his own source—the *brahma* power. Whoever (as king) injures him (the Brahmin), he injures his own source (of power). He becomes even worse like one who has injured another more excellent (than himself). He (the *Brahman*) was not even now able to flourish (here). He created the Vis' (the free people) and those classes of the gods who, as forming collective bodies, are respectively called Vasus, Rudras, Adityas, Visve Devas, and Maruts. He was not even now able to flourish (here). He created the Sudra caste as Pushan (or nourisher). This earth is indeed the Pushan; for she nourishes all this—whatsoever there is. He was not even now able to flourish (here). He therefore created justice as other (than all these). That which is justice is *kshattria* of the *kshattria* (that is, it is a sovereign power over all sovereignty). Therefore there is nothing higher than justice. Thus it is by means of justice, as through the instrumentality of the king, that the weaker man controls the stronger. Verily whatever is such Justice is indeed Truth. Therefore they say that the man who declares Truth declares Justice. Similarly they say that the man who declares Justice declares Truth. Indeed this (one) only constitutes both of these."

We have here a suggestive statement of the ancient Indian theory of the state, which throws some light on the meaning of the ceremony of coronation. That the king's power comes from the great source of all power and of all creation, that the power of religion and divine wisdom is really higher than the power of valour and sovereignty, which latter is indeed dependent on the former, that in practice, however, religion and its ministers are to be under the control of the king, who, in his turn is debarred from doing any thing tending to injure it or them, that the state so related to religion is not complete without the citizen subjects and the labourers, and that the political structure so built upon a divine foundation

can be maintained and well looked after only by means of justice and truth are among the chief ideas contained herein. It is in accordance with these that the supremacy of the king is declared thus in the Lawbook (VII. 2—10,) attributed to Manu:—

"A Kshatriya, who has according to rule received the sacrament prescribed by the Vedas, must duly protect the whole of this world. When these created beings were without a king and dispersed through fear in all directions, the Lord created the king for the protection of the whole world....Because the king is made up of the elements derived from the chiefs among the gods, he therefore surpasses, all created beings in glory....Even an infant king must not be despised under the impression that he is a mere man; he is indeed a great deity in human form....Having fully considered the duty to be done, the power that is available, and the place and time, he again and again assumes many forms for the attainment of justice."

There is in the *Aitareya Brahmana* (VIII. 3.) an interesting description of the ceremony by which Indra was inaugurated as king over the gods; and therein the gods are said to have bestowed upon him such sovereignty as was possessed by Varuna. In the assembly of gods headed by Prajapati, the Lord of Creatures, the gods speaking of Indra said to one another—"This is indeed among the gods the most vigorous, most strong, most valiant, most perfect, and most efficient. Let us install him as king." When all the gods agreed thus about the fitness of Indra to be king, they brought for him a throne made in the following unique fashion. Its various parts were all made up of the hymns of the *Rigveda* and certain famous songs of the *Sāmaveda*; and of the material by which it was upholstered it is said—"The *Rik* verses were made the threads of the texture which went lengthwise, the *Saman* songs were the threads which went crossways, and the *Yajus* formulae formed the intervals in the texture." The goddess of glory formed the covering of the throne, the goddess of fortune served as a pillow thereon, and its various parts were supported by various gods. After calling upon some other gods to ascend the throne before him and make it thus worthy of reverence, Indra is said to have himself ascended it. Then he was proclaimed as king, as universal ruler, as the possessor of all wealth, as independent sovereign and so on; and then

the gods went on to declare—"The *kshattria* power (of heroism and valour) is born, the Kshatriya is born, the supreme lord of the whole creation is born, the master of the people is born, the destroyer of hostile castles is born, the slayer of the Asuras is born, the defender of the *brahma* power is born, the defender of religion is born." After this proclamation, Prajapati the leader of the gods assembled there for the coronation of Indra, sprinkled him with the holy water pronouncing the following formula:—"Varuna who had taken the vow (to perform the coronation sacrifice) sat in the midst of the homes of (his people)—the performer of auspicious deeds for the attainment of supreme sovereignty, of lordship over wealth and pleasures, of independence, of distinction as ruler, of supremacy, of the ownership of a kingdom, of a great overlordship over a great kingdom, of self-control and firmness." With this sprinkling of the holy water on his head covered with gold his sovereignty became well ratified and fully established; and then the gods of the various regions of the world proclaimed his kingship in their respective quarters wishing long duration for his rule over the universe.

Indra thus became, it is said, king of gods; and it is declared that the Kshatriya who, like Indra, undergoes such a ceremony of royal inauguration becomes, also like Indra, possessed of valour, victory, independence, distinction, sovereignty, self-control and immortality. Such an inducement to the human king to place himself under the guidance of the priest for the purpose of his own installation as sovereign is well calculated to be effective. Moreover, in spite of the limitation, which obedience to the authority of religion imposed upon the autocracy of the ancient king, he could not easily avoid this ceremony of coronation, and the consequent subordination of his royalty to religion; for in those days it was impossible for him to obtain the public recognition of his kingship without the public celebration of such a ceremony. In modern states, however, it has become more or less a mere matter of formality,

and uncoronated kings are not therefore unknown to modern history. The details of the Vedic ceremony of royal coronation, as found in the *Aitareya Brahmana* and the *Krishna-Yajurveda*, relate chiefly to the *Rajasuya* sacrifice which has been already pointed out to be the religious ceremony by which the kingship of the king is caused to be born. It seems probable that the account contained in the latter work is the older one; and according to it (I. 8. 9.) the king, before actually commencing the coronation sacrifice, has to go to the houses of the chief representatives of wealth and custodians of power in his kingdom, and conduct worship there by offering certain prescribed oblations to the sacred fire and making the prescribed gifts to the officiating priests. In this way he first pays his visit to a chief Brahmin who serves as the representative of his class, then he goes to the house of a chief Kshatriya in the kingdom, then to the house of his own chief consort, then to the house of the subordinate wife, then to the house of the commander-in-chief of the army, then to the house of the royal charioteer, then to the house of the headman and leader of the people in the royal capital then to the house of the officer in charge of the affairs of the royal harem, then to the house of the king's treasurer, then to the house of the chief collector of the revenues of the sovereign, and lastly to the house of the master of the royal gaming-house. Then he goes to his own quarters and there offers, in the way of worshipping Indra, the good protector and the reliever from sins, a prescribed oblation to the sacred fire; and one of the priests declares thereafter—"May our king become a ruler who is capable of destroying the enemies and, may he destroy the enemies." The various offerings to be made to the sacred fire on the various occasions mentioned above, as well as the various gifts to be given away by the king on all those occasions, are all specified with certain peculiar and somewhat far-fetched ideas of appropriateness, the main feature of which is the wishing of plenty and prosperity to the king. The political meaning of

this peregrinating divine service is too plain to need any explanation.

On the day before the actual royal inauguration ceremony the king is made to worship Mitra and Brihaspati by offering an oblation to the sacred fire on behalf of each of them, one of the chief injunctions being that the altar on which the offerings are to be made, the materials of which they are to consist, and the instruments by means of which they are to be offered are all to be free as far as possible from artificial preparation. It is explained that the object of this injunction is to obtain for the king an easy sovereignty over forests and mountains, which were in ancient times often appropriated without the trouble of having to fight battles. Mitra is the great sun-god viewed as a friend and benefactor, and Brihaspati is the god in charge of speech and divine wisdom; and it is clear that, in invoking their aid at the commencement, the king seeks for himself the friendliness of the divine powers and wishes to be helped by their unfailing wisdom. Then, on the day of the coronation, the ceremony begins with the king's beseeching the permission of the gods for having it duly conducted. (Vide *Krishna-Yajurveda*—I. 8. 10.) For this purpose he worships by means of special sacrificial offerings Agni who is the Lord of the Household, Soma who is the Lord of Forests, Savitri who is the True Bestower of Blessings, Rudra who is the Lord of Cattle, Brihaspati who is the Lord of Speech, Indra who is the Chief, Mitra who is Truth, and Varuna who is the Lord of Justice. Afterwards the leader of the priests who conduct the ceremony takes hold of the king's hand, and says—"May Savitri bless thee with blessings, may Agni bless thee so as to make thee the lord of the household, Soma so as to make thee the lord of the forests, Rudra so as to make thee the lord of cattle, Brihaspati so as to make thee the master of speech, Indra so as to make thee a chief, Mitra so as to give thee truth, and Varuna so as to make thee the lord of justice. All those gods who bestow divine blessings—may

they bless this person who is so-and-so with freedom from enemies, with great strength, with great supremacy, and with great sovereignty over the people." Then another priest turns towards the assembled people and declares—"O ye Bharatas, this is your king, and the god Soma is the king over us Brahmins." It will be seen that at the conclusion of the ceremony of inauguration the Brahmins also own allegiance to the sovereign; but at this stage of the ceremony, the priests having still to bestow the sovereignty on the sovereign, cannot appropriately make themselves subordinate to him, inasmuch as such a subordination now would imply the subordination of the power of religion to the power of the state. After the presentation of the king in this manner to his people so as to obtain their recognition of his kingship, the king goes through the process of washing and wiping his face, saying—"This kingdom has been made obedient to me; Varuna has assumed his own form (as the Lord of Justice) we have become worthy to be the worshippers of the holy Mitra, and feel that we understand the performance of the great sacrifice (of royal inauguration). All (of us) have become worthy of worshipping Varuna. Mitra by his coming has enabled us to overcome our enemies; the priests have been protected by the sacrifice; and may Agni, the god of fire, take away old age and weakness from us and prolong our lives." Afterwards the king steps forward in the eastern direction taking three strides, and says while striding forth—"Thou art the stride of Vishnu (conquering this world below), thou art the stride of Vishnu (conquering the intermediate world), and thou art the stride of Vishnu (conquering the world above)."

* The next *anuvaka* of the *Krishna-yajurveda* (I. 8.11.) deals with the collection and sanctification of the various liquids with which the king is to be sprinkled over, so that sovereignty may thereby be made a part of his newly born nature. Sea-water, river-water taken from progressive and retrogressive waves, well-water, water from the

whirlpool, rain-water fallen during sunshine, clear transparent water from on which the solar disc is reflected, stagnant water, dew-water, the amniotic liquid of the cow, milk, curds, ghee and honey are the various liquids needed for the purpose. These are held in different vessels and are supposed to be capable of bestowing various benefits on the king who is to be sprinkled with them. (Vide *Aitareya-Brahmana* VIII. 4.) They are all first propitiated and made holy by the priest dropping a few drops of ghee into each of them by means of a leafy spoon, saying while doing so—"O ye waters that have come here for a special purpose, O ye that are splendid, sweet and powerful, ye the wise gods have accepted for the *Rajasuya* sacrifice; by means of ye they sprinkled Mitra and Varuna (so as to bestow sovereignty on them,) and by means of ye they made Indra overcome his enemies. Ye are bestowers of dominion; bestow dominion; *Svaha*." Then by means of another leafy spoon the priest takes some quantity of each of these liquids into a fresh vessel pronouncing the same formula as above with the modification that at the end of it, before saying *Svaha*, he adds the name of the king on whom dominion is to be bestowed. The liquids so taken together into this new vessel are thus (K. Y. V. I. 8. 12.) addressed:—"O ye sweet and divine waters, mix well with your sweet companions, ye who are solicitous of bestowing great glory on the Kshatriya. Uninjured do ye stay here (within this vessel), ye who are powerful, bestowing great glory on the Kshatriya." Then a hundred pieces of gold are tied together and thrown into the vessel containing the mixed liquids. Gold which is 'unconsumed by fire' which is the 'friend of speech' and by which the *soma* plant is purchased is called upon to sanctify through its own brilliancy the brilliant liquids within the vessel, brought together there for the sake of the *Rajasuya* sacrifice. Then they are declared to form the abode of Varuna, who is the child of the waters that are dear to him like loving mothers, and are afterwards distributed into four wooden vessels from

which the sprinkling on the king is to take place. After this is done the king is presented with a robe which is conceived to be the embryonal sac out of which his heroism and royal power are to be born. He is then given his diadem to wear, after which one of the priests takes hold of a bundle of *darbhā* grass made up of one hundred and one blades, and sprinkles water therewith on the king with the object of purifying him for the ceremony.

While he is being so sanctified the leader among the officiating priests says—"Agni has now become the Lord of the Household, Indra has now become the Highly Famous, Pushan has now become the All-knowing, Mitra and Varuna have now become the Truth—increased, Heaven and Earth have now become the Firm--resolved, the goddess Aditi has now become the All-formed, and this person who is so-and-so has now obtained among this people and in this state great power, great supremacy, and great sovereignty over the people. O ye Bharatas, this is your king; of us Brahmins, the god Soma is the king." Then the chief priest presents the royal bow to the king, addressing it thus—"Thou art the celestial weapon of Indra which destroyed (his enemy) Vritra; may this (king) destroy his enemy by means of thee." The king is thereafter presented by the same priest with three arrows wishing that they may become the injurers of his enemies. The king while accepting them says—"May ye protect me in front, protect me behind, protect me at the sides, protect me in all regions, and protect me from all destroying agents." Then holding up both of his own arms he says—"O ye pillars of metal shining with the lustre of gold, do ye at the dawn of day, when the sun rises, get up to the seat on the chariot like Mitra and Varuna, and (therefrom) execute the work of protection and punishment."

After this (K. Y. V. I. 8. 13.) the *adhvaryu* priest urges the king to march out to the conquest of the various regions, himself fol-

lowing him mentally in the imaginary march and invoking appropriate divine blessings on him so as to secure for him and his the sure help of divine protection. He is thus asked to march out first for the conquest of the East, then for the conquest of the South, then of the West, then of the North, and lastly for the conquest of the upper regions. Then the Maruts and some other gods are worshipped by various offerings offered in the sacred fire, and evil spirits that may cause harm are also propitiated and pacified so that no harm may in any way befall the king. The next part of the great ceremony consists in the king's ascending a specially constructed seat and being sprinkled over while seated thereon with the hallowed mixture of liquids already described. Before ascending the seat he has to spread a tiger skin on it and offer his prayers to the gods. This is described in the *Aitareya Brahmana* (VIII. 2. 3) thus:—"He spreads the tiger skin on the throne in such a manner that the hairs are seen above and that that part of it which covered the neck (of the animal) is turned to the east. Really what is known as the tiger is the *kshattrā* (or the royal power) among the beasts of the forest. And the Kshatriya constitutes the royal power (among men). By means of the royal power (of the tiger) he makes his own power efficacious. He approaches that (seat) from behind, himself facing the east; and then kneels down so as to touch the earth with the right knee. Then holding that (seat) with both the hands, he prays—'May Agni ascend thee with the *gayatri* metre, Savitri with the *ushnih* metre, Soma with the *anushtubh* metre, Brihaspati with the *brihati* metre, Mitra and Varuna with the *pankti* metre, Indra with the *trishtubh* metre, and the Visve-Devas with the *jagati* metre. After them I ascend thee to acquire kingship, imperial dominion, enjoyment, independence, distinction, supreme kingship, great kingship, authority, self-control and firmness.' After this prayer he ascends that seat with the right knee first and then with the left knee. According to

the *Krishna-Yajurveda* (I. 8 14). the king, while spreading the tiger skin on the royal seat, has to address it thus—"Thou art the splendour of the god Soma. May I acquire splendour like thine!" Then he places on it one hundred pieces of gold and says—"Thou art immortality. Do thou save me from death." Thereafter a shining golden vessel with holes all around is placed over the king's head to receive the sacred liquid as it is let fall on his head, and he, after ascending the seat, kicks a piece of lead towards a eunuch who is somewhere on the right side, and then kicks a piece of copper towards a barber who is on the left side. The kicking away of the lead has been interpreted to mean the king's disregard of unmanliness, and the kicking away of the copper has been interpreted to mean the driving away of sin. After this the king continues to be seated with uplifted arms on the seat to which he has ascended, when he is sprinkled with the sovereignty-bestowing mixture of liquids. This sprinkling with the hallowed mixture of liquids corresponds to the process of anointing in the Christian ceremony of coronation. Before the sprinkling is actually done the priest invokes divine blessings on the king, saying:—"King Soma and Varuna and all those gods whose blessing is justice, may they bless you with speech, may they bless you with life, may they bless you with sight, and may they bless you with hearing." Now the four wooden vessels in which the hallowed liquid mixture is contained are taken up by four different persons who seem to be intended to serve as the representatives of the four castes and thus of all the people. One of the priests, standing in front of the king, sprinkles him with the liquid; a Kshatriya sprinkles the liquid from on the right side, a Vaisya from behind, and a friend from among the people from on the left side. While this sprinkling goes on the priest says—"I sprinkle (so as to cover) thee with the glory of Soma, with the splendour of Agni, with the effulgence of the Sun-god, with the

virility of Indra, with the heroism of Mitra and Varuna, and with the strength of the Maruts. Among those who are powerful thou hast become the lord of the powerful. Do thou rule so as to excel (all) those that are illustrious." After this the robe of the king is removed, and the sacred liquid which may be trickling on it, as well as whatever of that liquid remains unused in the vessels, is collected together and a part thereof offered as an oblation to the fire in the way of propitiating the gods Rudra and Yama. Thereafter the king in the company of the queen and of the dearest among his sons, who is to become the heir apparent, offers the all that remains of the liquid to the sacred fire with the object of worshipping Prajapati the Lord of Creatures, praying—"Prajapati, there is none other that is capable of causing and controlling all these things that are created. With whatsoever desire we offer these offerings unto you, may that be fulfilled unto us, and may we become masters of wealth and prosperity!"

According to the *Aitareya-Brahmana* (VIII. 2. 3.) the priest while sprinkling on the king this holy liquid has to pronounce certain scriptural verses which may be translated thus:—"These waters are the most auspicious, these are medicinal preparations for the cure of all (ills), these are the increasers of dominion, and these are the givers of immortality to the wielder of dominion. By means of the waters with which, for the bestowal of sovereignty, Prajapati sprinkled Indra, king Soma, Varuna, Yama and Manu—by means of those waters I sprinkle thee. Do thou become here supreme king over kings. To thee who art great among the great and sovereign over the people, the illustrious mother gave birth, the blessed mother gave birth. By command of the divine Savitri, and with the arms of the Asvins and the hands of Pushan, I sprinkle thee (so as to cover thee) with the splendour of Agni, the effulgence of the Sun-god, and the virility of Indra. so that you may

obtain strength, wealth, fame and enjoyment." Religiously considered this sprinkling of the king with the sacred mixture of liquids is the most essential part of the ceremony, and a hymn that relates to it is well worth quoting from the *Atharvaveda* (IV. 8.):—

1. Himself blessed with prosperity he bestows plenty on the prosperous, and he has become the lord of beings. *Mrityu* (the king and final arbiter of justice) performs the *Rajasuya* sacrifice for him, and let him as king accept this kingly office and function.

2. Go thou to win, but do not be undesirous, O thou who art valorous, wise and harmful to the enemies. Do thou ascend (the throne), O thou prosperer of thy friends; and may the gods speak to you (in terms of partiality).

3. May all (people) surround and adorn him who ascends (the throne). Clothed in kingly sovereignty and possessed of self dependent glory, he performs his (royal) duties.

4. Seated on the tiger skin, do thou, like a tiger, overrun all the great regions. May all the people desire to have thee (as ruler), and may the heavenly waters which are fertilising bestow their love on thee!

5. Those heavenly waters which, whether they be in the air or on the earth, produce contentment through their (own) virtue, I sprinkle thee with the glory of all of them.

6. May the heavenly waters which are possessed of virtue give thee prominence by means of their glory; and may *Savitri* cause thee to be such (a king) as will prosper his friends!

7. These (waters), embracing the tigerlike (king), love him as they love the ocean, on account of his endurance, so as to bestow on him great good fortune. Him who is firmly seated like a tiger on an island in the midst of the waters—him his follower's do adorn.

These quotations have been given from the *Aitareya Brahmana* and the *Atharvaveda* with the object of making clear the meaning and purpose of

this ceremonial sprinkling of the king with the prepared holy liquid. It is evident that, after undergoing this operation of sprinkling with the divine and holy waters, the king is considered to have actually come into possession of full and undisputed sovereignty; and it is also evident from the ceremony, as described up to this point, that his kingship thus ratified is approved of and accepted by all the people including the nobility and the commonalty; indeed, it is even indicated that they are among those who bestow it on him. Before this royal inauguration ceremony is concluded (K. Y. V. I. 8. 15.) the king is presented with his royal chariot, to which three horses are yoked, and is asked to ascend it and to proceed in state as if on an expedition of victory. Accordingly he goes round in the chariot as desired, and comes back declaring that his desires have all been fulfilled, and that he is well possessed of strength and heroism. Then as he descends from the chariot he is presented with a pair of slippers made of the skin of the wild boar, the idea here being that in the way in which the wild boar is among animals the embodiment of anger, he, the king, should also be capable of great anger whenever occasion needed it. After offering a prayer to the earth-goddess he puts on the slippers, and then has three metallic balls fastened on his shoulders, one of silver on the left shoulder, and two others, one of copper and another of gold, on the right shoulder. While these are being fastened he prays for long life, for strength and for glory. The wearing of these balls on the shoulders is probably symbolic of the king's bearing the burden of all the three worlds on his shoulders. Then after a renewed offering of oblations to the sacred fire in worship of the gods, the metallic balls are removed; and thereafter the royal chariot is with a prayer sent back to the stables, there to be always well and ready to serve the king in his career of conquest. Then (K. Y. V. I. 8. 16.) the king is enthronised, and before he ascends the throne he seeks the favour of the *Visve-Devas* who are the gods to whom the people

belong by right of the protection they bestow. Looking upon the throne as the central pivot and source of royal power he ascends it with reverence hoping for happiness and prosperity from his seating himself thereon. The priest announces that the king has taken his seat on the throne by saying—"Varuna, after undergoing the inauguration ceremony, has seated himself (on the throne) in the midst of the homes (of his people), and is performing auspicious functions for the attainment of supreme sovereignty." Then the sacrificial priest and the officers of the state and the leaders of the people sit round the throne. The *adhvaryu* priest sits in front, the *brahman* priest sits on the right, the *kotri* priest sits behind, and the *udgatri* priest sits on the left of the sovereign. The time for paying homage to the enthroned king having arrived, he now addresses the priest in front calling him—"O Brahmin!" The priest replies saying—"O King, thou art the Brahmin; thou art Savitri of unfailing promise and blessing." The king similarly addresses the priest on the right side, and he says in reply—"O King, thou art the Brahmin; thou art Indra of unfailing vigour." In doing homage in this manner, the priest behind says—"O King, thou art the Brahmin, thou art Mitra who is well worthy of service;" and the priest on the left side says—"O King, thou art the Brahmin, thou art Varuna of truthful justice." And in the way of practically recognising the acknowledged superiority of the sovereign in status and in power the *brahman* priest places in the King's hand the sacrificial instrument known as *sphya*, and wishing that he should conquer all the five regions of space the priest again places in his hands five golden dice to serve as a symbol of the wished-for conquest. The royal treasurer, the collector of the king's revenues, and the superintendent of the royal harem pay their homage to the sovereign in turn; and after the offering of a final benedictory oblation this ceremony of royal inauguration is concluded. Some say that at

the conclusion of this ceremony the king is exhorted to be firm and immovable; and according to them, the following hymn from the *Rigveda* (X. 173.) is used for the purpose of such an exhortation:—

1. I have brought thee forward (as king); do thou grow (as master) in our midst. Stand firm and be immovable. May all the people desire to have thee as king, and may dominion never slip away from thee.

2. Do thou prosper here in this very place; do not move away (from here). Be immovable like the mountain, stay here firmly like Indra, and the (burden of) royal dominion here.

3. Indra has firmly upheld him (himself having been propitiated) by means of an enduring oblation. May Soma and may Brahmanaspati speak to him (in terms of friendly partiality)!

4. Firm is the sky, firm is the earth, firm are these hills; the whole of this world is firm, and this person here is a firm sovereign to his people.

5. May king Varuna maintain thy dominion firmly, may the god Brihaspati maintain it firmly, and may Indra and Agni also maintain it firmly.

6. We have propitiated the firm Soma by means of an enduring oblation. And now Indra has made the people peculiarly thine own and the bringers of tribute unto thee.

Such is a somewhat incomplete sketch of the ceremony of coronation as described in the ancient Vedic literature of India, belonging to a time which cannot certainly be later than 3000 years ago. Yudhishtira's coronation is described in the *Mahabharata* and Rama's coronation in the *Ramayana*. Many of the most interesting details of this ceremony of coronation are omitted in both these famous Indian epics. Nevertheless, there is enough in them enable us to make out that both Yudhishtira and Rama were officially installed as sovereigns more or less in accordance with the Vedic ceremony that has been here described. In the *Santiparvan* of the *Mahabharata* (chapter 40.) we find an account of the coronation of Yudhishtira.

thira. He is therein said to have taken his seat among his friends and relations in the coronation hall, so as to be approached by all the people of his kingdom who wanted to do their homage to him. These were led and presented to the king by the *purohita* i. e. by the family priest; and after all the needed silver, gold, copper and other materials were made ready, and the various required liquids also were collected. Yudhishtira and his queen moved to the throne whereon a tiger skin was spread. They ascended it, and then the priest offered oblations to the sacred fire as commanded in the scriptures. Then Krishna sprinkled them with the holy liquid, then Dhritarashtra did the same thing, and then all the people did it in their turn. There was loud music produced at the time. Yudhishtira accepted the presents offered to him by the people and honoured them all by kindly reception and generous gifts. Similarly in the *Yuddha-kanda* of *Ramayana* (Chapter-131.) there is a brief description of the coronation of Rama. When Rama, after the destruction of Ravana, arrived at Ayodhya with his queen Sita, his brothers and followers and priests made every thing ready for his coronation. Water was obtained from all the distant seas and rivers, and Rama was placed along with Sita on the golden throne. Then Vasishtha, the chief family priest, and many other learned priests "sprinkled that tigerlike person with the clear and fragrant waters in the way in which the Vasus (sprinkled) the thousand-eyed Indra." Maidens, ministers and soldiers sprinkled the holy water and the juice of various plants of virtue on him. Then he was crowned and ornamented, and his brothers and followers rendered him service by holding aloft the royal umbrella and other insignia of his royalty in their hands. There was music and dancing and much exhibition of joy; and the king distributed liberal gifts to the Brahmins. In the account that is thus given of both these coronations, it must be easy to see how they refer to the Vedic ceremony; and although no fuller description of it has been given in the epics,

perhaps under the impression that such a description was out of place there, still there are many interesting features in the Vedic ceremony that make it worthy of study and attention. Its deep religious import, its symbolic character and impressiveness, its political meaning and rationality are all calculated to enhance the fame of ancient Indian civilisation, and to make us feel in this year of the coronation of India's present Christian Emperor that this India of ours is a country of which any Empire may well be proud, and that her loyalty, being rooted in religion and in the continued moral culture of thousands of years, is always certain to be a mighty support to the sovereignty which derives its strength from justice and from popular prosperity. The empire of justice necessarily culminates in the empire of love and liberty, and the sovereignty that is firmly enthroned in the heart of the people and is broad-based on their will is divinely blessed and endures for ever.

M. RANGACHARYA.

CORONATION ODE.

IN HONOUR OF EDWARD VII. AND QUEEN ALEXANDRA.

(SELECTED FROM *The Lady's Realm*.)

Britannia's Sovereign, hail!
On this thy Coronation Day
Thy subjects homage pay to thee;
The teeming millions bend the knee,
And own thy gracious, loving away.

India's great Emperor, hail!
Hearts true as steel acknowledge thee
As ruler 'neath the tropic sun,
And, ere to-day's long hours have run,
Shall chant aloud their loyalty.

Lord of the Empire, hail!
Australia's shouts proclaim her praise;
Canada bows before thy name;
South Africa echoes thy fame;
Isles of the Sea their voices raise.

Edward the Seventh, hail!
God bless thee on this happy day,
And that dear Lady at thy side;
For King and Queen, the Empire's pride,
Our loyal hearts shall ever pray.

God Save King Edward VII.

God crown thee King!
God keep thee King!
And o'er thy rule God's gracious blessing rest;
And all thy people rise and call thee bless'd!

Thy task's no easy one:
Victoria's mighty throne
Requires thine utmost, both of heart and head:
Thy mother's name, and greatness are not
dead;

For, wheresoe'er old England's flag doth wave,
By ice-bound cliff, or hero's lonely grave,
Her memory is fondly cherish-ed.

Thine inheritance is great: great thy sway:
From Shetland's stormy seas to Zealand's coast,
From Cape Agulhas to Kamschatkan seas,
Thy warships delve the deep and brave the
breeze.

The Natives of Jamaica and Cathay,
The swarming hosts of India, proudly boast
That Britain's King is Lord.

Thine Empire is of hearts, not hands,
Built up of blood and brain;
And of that courage which demands—
In storm, in stress, in strife, in strain,
Self-sacrifice and pain!

Great Eastern potentates acknowledge thee;
Great Western Powers give ear unto thy voice:
In Greater Britain there is joy this day;
Australia and America rejoice.

For blood is thick, and kinship strong,
And at her need her kins-men throng
To die, and to defend:

For Britain's greatness is the cause
Of envious hate; and nations pause—
For signs of weakness and decay—
Her Empire, then, to rend!

On this, thy coronation day WE, INDIANS,
voice—

What though great continents between us be—

With one accord our gladness, and rejoice
With all our fellow subjects, nearer thee.

The tie that links us with Great Britain is of
steel,

Made fast with firmest bands of justice, trust,
And sympathy: suspicion, and the ugly lust
Of hate, have vanish'd, and for thee we feel
The love that consecrates a commonweal.

Thy subjects are of races, and of creeds,
As diverse as they're many: Islamite
And Hindu, Buddhist, Parsee, Jain,
All stand around thy throne, and all unite
In wishing thee prosperity; thy needs
They would supply, and serve thee they would
fain.

As some tall tree set deep midst forest bowers,
Above its small companions proudly towers,
So towers thy throne among the kingdoms
round,
And Freedom, its home, 'neath Britain's flag
hath found.

As slender columns of some temple grand
Uprear a mighty roof of fretted gold,
The various peoples of this ancient land
Thy throne, in loyalty and love, uphold.


Cold would be our loyalty, if caste or creed
Could lessen our liege-love. In ev'ry shrine
where God

Is worship'd—Allah, Brahm or Christ—Indeed
Where'er the need of supplication to a Power,
Beyond us, and above us, is experienc'd—there,
Rises for thee and thine, one universal prayer
From Indian hearts: that God his gifts would
shower

On India's Emperor; would grant him length
Of years; dower him with righteous strength
To guard the Empire, and to always be
The bulwark strong of British liberty.

A. P. SMITH.

HAND WEAVING.

 F the indigenous industries of India hand weaving remains the chief, but its importance is gradually dwindling and it seems hardly likely that anything can be done to prevent it sinking into comparative insignificance. From the census returns of 1891 it would appear that there were then upwards of nine and one-third millions, more or less, dependent upon it for a livelihood. The bulk of these people were women and children and at a guess one might set down the number of handlooms at about two millions. Competition with the products of machine looms and a radical change in the tastes of the wealthier classes in regard to clothing have reduced the weavers to an extremely impoverished condition. Though to a large extent inhabitants of towns in which educational facilities abound they have been unable to give their children even the most elementary education, and their only means of meeting the competition they have had to face was by selling their labour at lower and lower rates till at length a bare subsistence is all they can command. Their appliances are extremely simple and yet by patient labour are capable of turning out products which have hitherto baffled the skill of weaving mechanicians. But the difficulty of making bordered cloths by machinery, till recently insuperable has now been overcome and it is only a question of time before the weavers of these cloths, and they form a very large proportion, if not the bulk, of the hand weaving community, will find that they have to face a keen competition for the market in which they have for so long enjoyed an absolute monopoly. In the long run machinery must win if the prize is worth winning and a trade which in all its branches gives employment to many hundred thousand looms is worth capturing.

The progress of the machine border loom is a danger threatening to disturb the well-being of a

large section of the weaving community, but no one takes any notice of it and no one in authority makes the least attempt to ascertain the real facts of the case and warn the artisans likely to be affected. In industrial matters the rulers of India have followed too much the precedents of the west. The interests and rights of the working classes are carefully looked after in certain directions by various experts such as an Inspector of Mines, Factory Inspectors, Boiler Inspectors and so forth. But the great bulk of the artisans work by themselves or in very small associations which do not come within the purview of these expert inspectors and they are left to themselves to wallow in their ignorance and conservatism and to be gradually wiped out of existence by the pressure of imports from Europe and factory-made goods in India. In 1866 the Secretary of State for India deputed Mr. J. Forbes Watson to examine the products of the hand-looms of India and to collect information for the benefit of the power loom weavers in England. No corresponding assistance has ever been rendered to the handloomweavers by the State and such changes as have taken place in their methods of working have been initiated either by the philanthropic efforts of missionaries or by private enterprise in its endeavours to foster trade. The spinning wheel has practically vanished, vegetable dyes are scarcely ever used, save the now direly threatened indigo, and handweaving is on the decline. There is a great deal of false sentiment about much that has been written on the decline of handweaving and admiration for the picturesqueness and simplicity of the weaver's craft has led to neglect of the other side of the account—of the poverty and ceaseless toil of the weaver's life, of his damp and dismal workshop and of the general insanitary conditions with which he is surrounded. In truth the decline of handweaving is only to be regretted because of the misery and suffering which millions must endure owing to the loss of their livelihood, poor as it is, and their

after inability to take up any new industrial occupation. The problem presented by the weavers is in truth a very serious one and we propose to briefly discuss what measures may be taken by the State to help this section of the artizan community over their difficulties.

In the full belief that in a purely mechanical operation like weaving, the machine must ultimately triumph over the hand-loom, no matter how cheap may be the labour of the worker, all that we can hope to suggest are palliative measures by which the period of transition may be bridged without any violent industrial dislocation. First and foremost we should place at the weaver's disposal the best technical skill available to enable him to improve his methods of production and thus enable him to hold out for a longer period against the inroads of machine-made goods in his markets. Secondly instead of leaving him to the mercy of the middlemen he should be given assistance in commercial matters and as far as possible the producer should be placed in direct communication with the purchaser. Lastly special attention should be devoted to the education of the community so as to enable them to avail themselves of other outlets for their energies.

It will be convenient to discuss these suggestions at length and to deal with them in the order given. Practically the first suggestion amounts to stating that facilities for industrial or technical education should be provided for handweavers. At the outset we may frankly admit that there is probably not in the country any one capable of stating what can be done to help the weaver. If we knew how to proceed the matter would be comparatively simple and would resolve itself mainly into a question of providing funds. It is easy enough to obtain the assistance of expert weavers from outside but they are not acquainted with the weaving problem as it is presented here and though they might give valuable advice yet they can do nothing more than indicate the general lines upon which experiments may be

conducted. The weavers are exceedingly poor and in the main rely on middlemen for the small amount of capital actually employed in their trade—they are ignorant and narrow-minded and averse to enquiries regarding the detail of their trade. Each man works for himself and there is little or no co-operation among them. There is no chance that any weaver may arise with an intimate knowledge of the technique of the trade and with a mind sufficiently wide to grasp the general trend of the economic forces which are gradually driving his fellow castemen to misery and despair. The only hope lies in the conduct of experimental weaving by the State with the object of working out by degrees a better system of production. This course we have embarked upon in the School of Arts, Madras, and we have established a weaving shed for the purpose of ascertaining by experiment what can be done. For about a year work has been in progress and without entering into minute technical details it is proposed to briefly state what are the tentative conclusions arrived at. These are that the native method of preparing the yarn for the loom is extremely laborious and very defective and that in consequence the outturn of the looms is much smaller than it would be if a better system were in vogue—that the native loom is capable of improvement at small expense by a slight modification of the slay whereby a "flying shuttle" can be used. To this, however, an exception must be made in respect to "bordered cloths" and so far, for this class of goods, it must be confessed that no practical improvements have suggested themselves. The introduction of the "flying shuttle" converts the native hand loom into a European hand loom and the more perfect the conversion the better is the result. A self-contained frame loom can be made for about Rs. 60 and with expert weavers there is no doubt that the outturn of cloth can be doubled provided the warp is good. This is an important proviso because the warp as ordinarily prepared by native methods is not good

enough. Native warps are not sufficiently well-sized, they are not long enough and the threads are not perfectly parallel to one another. In the native hand loom these defects are not so obvious but directly the fly shuttle is used the weaver's troubles begin and more than half his time is spent in mending threads. By great care in the preparation of warps these difficulties have been to some extent got over but the extra expenditure on the warps counterbalances the saving on the loom. In the School of Arts weaving shed, we have come to the conclusion that some system of warping machinery of the type that is in use in power weaving sheds is necessary but at present no system that has been examined meets the requirements of the case. The crux of the whole matter appears to be "sizing" and nothing but the "slasher" sizing machine seems suitable. Yet it cannot be adopted because it is too big for the business required of it. One machine would easily supply 1,000 looms and the time has not yet arrived when it would be possible to set up so large a hand weaving factory. It is thought that at the most factories or associations of 100 hand looms could be formed and the problem is to obtain a warping mill and sizing machine that will turn out from 1,000 to 2,000 yards of warp a day. Hand-power is probably all that can be counted upon and the drying of the warps after sizing must be done without the aid of steam. Investigations are in progress with hank sizing and it is hoped that ultimately they may prove sufficiently satisfactory for practical purpose in which case the rest is easy. If success is attained in this direction it will be possible to provide buildings and plant for preparing warps at a cost of about Rs. 9,000 which will supply from 100 to 150 looms and such looms working with these warps may be expected to turn out twice as much cloth as a corresponding number of native looms. Assuming then that hank sizing is a solution of the difficulty a simple calculation shows us that a capital outlay of Rs. 150 per loom will enable double the output to be obtained. The total cost of preparing

warps with machinery will probably not be reduced but better warps will be obtained and the advantages of the fly shuttle loom will have to pay for the capital employed and provide better wages for the weaver. At the present time the weaver does not earn more than As. 4 per day and if his output were doubled he would get, other things remaining the same, As. 8 per day. Of this we may allow him As. 6 and take As. 2 for interest on his capital, depreciation of his plant and so forth. As. 2 per day may be taken as Rs. 30 a year or Rs. 3000 for 100 looms involving a total capital outlay of say Rs. 15000 made up as follows:—

Warping and sizing machinery Rs. 5000.

100 looms at 60/ each Rs. 6,000.

Shed for warping mill, godowns and offices Rs. 4000.

The weaver it will be seen is still supposed to work in his own house and where no weavers can be got within a reasonable distance it would seem possible that a capital outlay of Rs. 150 per loom would find a remunerative return. If these results can be obtained in practice, and it is the ultimate object of the experimental work at the School of Arts to demonstrate that they can be accomplished, the question of raising the capital should not prove insuperable. Should the comparatively simple system of hank sizing prove unsatisfactory and should it not be possible to devise any simple equivalent then we shall have to fall back upon the slasher sizing machine with its much greater cost and much greater output and instead of dealing with groups of 100 weavers we may have to attempt the problem of starting hand-weaving factories on a very much larger scale and with consequently much greater risks and a much more expensive system of control. The weavers of bordered cloths are entirely outside any such scheme as outlined above and enquiries indicate that between the methods they now employ and the highly complex machine border loom there is no intermediate stage. The more intricate and difficult the weaving process and the longer the time it

occupies, the less important becomes the preliminary work of warping and dressing and consequently the smaller is the scope for improvement in the trade as a whole.

Dealing now with the second suggested line along which assistance may be rendered to the hand-weaver it becomes obvious at the outset that the association of weavers in groups of 100 or more all deriving their warps from a central warping mill totally changes the conditions under which the trade would be carried on. It will not be difficult to imagine that the capitalist who sets up the dressing machinery will purchase the yarn, supply warps to the weavers, take back the finished goods and dispose of them to the market. He will be able to buy yarn in large quantities on favourable terms and obtain it from the spinning mills in suitable forms for his preliminary operations and will be able to introduce minor economies that in the long run become important. The management will have to possess business knowledge and acumen and will therefore be in a position to ascertain what goods are most likely at any given time to be in profitable demand. From the weaver's point of view the difficulty will be to prevent the warping mill owners from sweating their dependent weavers and to secure that a fair share of the profits falls to the lot of the weaver. So far as one can foresee the proposed changes will throw out of employment the vast mass of the women and children who now perform the greater part of the preliminary work. There will be still work for some of them and each weaver will find one assistant at the loom useful to mend occasional broken threads and perform a variety of small operations which would otherwise take up a considerable part of the weaver's time. Women work hand looms in most countries, in the future they may perhaps do so in India. At any rate none can gainsay the fact that it would be an immense advantage to the weaving community if their women and children were in the main relieved from the drudgery of industrial work and thus the women better enabled to attend to their domestic

duties and the children in a position to avail themselves of such educational advantages as may be within their reach. The Indian hand-loom has made a prolonged struggle against machinery and there is but little doubt that there will always be a limited field in which it can compete on level terms with machinery. Probably any weaving operation can be carried out in a power loom if the machine can be given a sufficiently long run of work but it is not always feasible to provide enough work of a certain kind to make the business commercially profitable and such work naturally falls to hand-loom weavers. It is very desirable that there should be instituted some kind of association of weavers and that funds should be subscribed to be devoted to commercial enquiries, to diffusing useful trade information, to opening new markets and generally supplying the ignorant hand weavers through, say, the managers of their warping mills with all the information relating to their trade which will enable them to keep abreast of the times. In the first instance there is no doubt that Government would have to initiate the organization and supply the necessary funds but there is no doubt that if it proved of real assistance to the trade it would soon become self-supporting. Lastly we come to the question of educating the weaving community, and this we regard as of great importance, for in the first place it is almost inevitable that a great proportion of the weaving castes will have to abandon their hereditary calling and seek a livelihood in other pursuits. It requires no demonstration to accept the statement that the better educated they are the better they will be able to take care of themselves and the less they will be dependent on the State. And secondly assuming that the schemes just outlined prove practicable and the weaving community is reorganized on a modified factory system it will require a more intelligent class of men at the looms to make it a complete success and in no way can we raise the standard of intelligence but by diffusing education amongst them.

The wages of the weaver have sunk to the lowest limit compatible with earning a livelihood because the community as a whole are ignorant and unintelligent. No new processes will better them unless in the working of them greater skill and more intelligence is required. Cloth may become cheaper, the outturn of the weaver may be greater but his position will be unchanged. This is but natural since whatever changes are effected he has no hand in them and consequently no claim to be rewarded. If new processes demand greater skill and intelligence it is but a common place to observe that for these qualities payment must be made. Herein we think is the root of the whole matter—if hand weavers are to be put in a better position their trade must be put on a higher level and in its operations there must be a demand for more skill and more intelligence than is necessary at present.

ALFRED CHATTERTON.

CROWNS AND CORONATIONS.

THE long reign and venerable age of Queen Victoria made the great majority of her subjects her juniors, and there were few if any of them who could remember her Coronation and the rites and ceremonies connected with the solemn event. Naturally, therefore, at Her Majesty's death and on King Edward's succession the attention of the British people was turned on and was attracted to the unfamiliar Coronation proceedings. From that time forward the Press, both at Home and here in India, has contained articles, descriptive for the most part, culled from records etc. of the Coronations and the incidents that have crowded round them from ancient days to the present time. Strange and stirring these incidents were, it goes without saying, and that such should be the case was only to be expected in times of political unrest when the monarch's accession to the throne, often abetted by intrigue, was not always the peaceful and harmonious event it has happily become nowadays. The incidents therefore, that will attend the Coronation of His Gracious Majesty King Edward VII, Emperor of India, will not be of the kind above

described; but that they will be significant none can doubt. Take one incident, and it is absolutely unique of its kind; for the first time in history, a King of England will be crowned not only King of the United Kingdom, but Sovereign Lord of the Lands beyond the Seas, and Emperor of India. For the first time that huge Empire, which has been centuries in making, will be acknowledged as a concrete fact, amid the acclamations of representatives from all its branches. This is the main incident that will distinguish the present Coronation from others that have preceded it, and there will be minor incidents equally significant of the fact that the Motherland recognises and is recognised by her offspring, and that all, no matter how widely separated by all that separates man from man, are indissolubly linked together by bonds of patriotism and affection stronger far than any bands of triple brass and tempered steel.

The purpose of this article, however, is not to enlarge upon any of the aspects of the Coronation now before us, but to call attention to a volume the publication of which is appropriately fortuitous at the present time. It bears the title of this article and it will be seen is by an author who has a reputation as an antiquary and writer on antiquarian subjects, the book also is in many respects the first of its kind. If our own recollection is not to be trusted in these days when "of the making of books there is no end" we can certainly place faith in the statement of the author who in the protracted and careful researches he has been bound to make for the purposes of his work, has not come across any work in medieval or modern days which as a whole overlaps the scope of the work he has so successfully undertaken. Briefly speaking, it is a work specifically devoted to the general history of regalia and the princely ceremonials of which they form part.

When we remember how far into the long-ago of the vanished years the English monarchy extends, it is not surprising that as much as a fair half of the well-grown time under review deals with Crowns and Coronations of England. The most interesting record we have respecting the crowns of the early English Sovereigns is that of King Alfred the Great, which was among the regalia removed from the Westminster Abbey to the Tower at the time of the Commonwealth. It has been the fashion to call it the crown of King Edward the Confessor—the anniversary of whose coronation day, the 26th June by the way is—but the evidence is almost conclusive that this is the

* Crowns and Coronations by William Jones, F.S.A. Chatto and Windus, London.

crown of Alfred the Great. It was only King Edward the Confessor's, because it had descended to him from King Alfred and it came into the hands of abbots and monks of Westminster and because it was entrusted to their care by the Confessor. Naturally the same crown was not used for every monarch. As with hats so with crowns, what may fit one man may not fit another, so each King had his own crown made for himself. To describe the crowns of the Kings of England from Anglo-Saxon times to the present day were a wearisome and profitless task. We may mention, however, that the Norman Kings followed as much as possible the design of the crown of the Confessor, but it did not take long for each king to follow his fancy, and one wonders whether it was the Lion-hearted king's love of a life of strife and laborious days with all their attendant discomforts which induced him to choose so uncomfortable a shape as a square crown, richly jewelled though it may have been. King John, the despicable, was rather a fop in the matter of crowns as he had a large number for use on various occasions; but his Keeper of the Regalia must have had an uncomfortable time in looking after them. The Tudor Crown of Henry VII has an interest for us in the present day as it practically of the crown of to-day. It was the crown of Richard III and its description is as follows:—Four arches springing from a circlet adorned with alternate crosses and fleur-de-lys surmounted by the orb and mound. On the death of Richard III on Bosworth Field, the crown was found hidden by a soldier in a hawthorn bush, but it was found and taken to Lord Stanley who placed it on the head of his son-in-law saluting him by the title of Henry VII. It was in memory of this circumstance that the red-berried hawthorn was assumed as the device of the House of Tudor. Among the devices on the tomb of Henry VII in Westminster Abbey are crowns in bushes. From the time of Henry VII until the reign of Charles I no important change took place in the fashion of the crown. In 1640 the Imperial Crown assumed the shape it continued to bear till the accession of Queen Victoria, when an exceedingly valuable crown studded with jewels was made in 1838. This was an exceedingly costly diadem and it was very elegant in shape, but the main features of the Tudor crown were retained, namely the four arches springing from a circlet, ornamented with crosses and fleur-de-lys. The Crown of England which, during the last queen's reign was worn on minor occasions of state, was similar in design but was principally goldsmith's work with very few jewels introduced. It may be

recognised in the later Victorian coinage of India, by which we mean the coinage bearing date subsequent to 1840—which date we believe did duty for coin minted in India till as late as 1867.

The Regalia of England, now exhibited in the jewel-house of the Tower of London, familiar to all visitors to that ancient and historic fortress in the heart of London, comprise the Imperial Crown, St. Edward's Crown, the Prince of Wales' coronet, the Queen Consort's crown the Queen's Diadem, St. Edward's Staff, the Royal Sceptre, or the Sceptre with the Cross, the Rod of Equity, or the Sceptre with the Dove; the Queen's Sceptre, the Ivory Sceptre and a richly wrought golden sceptre supposed to have been made for Mary, Queen of William III. In addition to the crowns and sceptres are the *Curtana* or pointless Sword of Mercy, the Sword of Justice, the Bracelets and the golden Spurs, the Ampulla and the Spoon, with other sacred vessels. St. Edward's Crown is not that of Edward the Confessor or Alfred as has been shown in the earlier part of this article, but one made for the coronation of Charles II, in commemoration of the ancient crown which was destroyed in that era of vandalism, the Commonwealth. The Queen Consort's Crown also dates from the time of Mary the wife of William III. The diadem was used for the coronation of Marie d'Este, Consort of James II. The Prince of Wales' coronet is of pure gold, plain without jewels, and is placed on velvet cushion before his seat in the House of Lords when the Sovereign opens or prorogues Parliament. The Royal Sceptre, which is placed in the right hand of the sovereign at the Coronation is a rod of gold richly ornamented. The Sceptre of the Dove, is rather larger than the Royal sceptre and is also of gold. It is ornamented with precious stones and at its end is a mound supported by a cross, sustaining a dove with expanded wings. In the year 1814 a similar sceptre was discovered in the Jewel House covered with dust. It was supposed to be the sceptre made for Queen Mary, who was jointly crowned with William III. The Queen's Sceptre with the cross of gold is also adorned with precious stones, but it is not so valuable or ornate as that of the King. Edward the Confessor's staff is a rod of beaten gold about 4 feet in length which was carried before the King at the coronation. The ampulla, or golden eagle, familiar to most readers, from pictures in recent illustrated pictures, is a golden eagle finely chased in which is carried the consecrating oil. This is probably the most ancient ceremony in connection with the coronation and goes back to the early days when kings were consecrated and not crowned

though even among the Hebrew kings the coronation eventually formed part of the ceremony of investing a king with regal authority. Among our own Anglo-Saxon kings, prior to the days of Alfred, it is common in the old chronicles to read that they were elected and consecrated or anointed, rather than that they were crowned. The ampulla now in the regalia and likely to be used at the king's coronation has been in existence since the days of Henry IV but it is doubtful if anything remains of the original receptacle. The Spoon also used in connection with the anointing ceremony is also of great age and is mentioned in a record of the coronation of James II as well as in Shaw's "Dresses and Decorations of the Middle Ages." The orb, mound or globe, which is placed in the sovereign's right hand immediately on being crowned and which is carried on the left hand on returning to Westminster Hall is a golden ball, six inches in diameter, embellished with precious stones, among them a remarkably fine amethyst, surmounted by a cross. The carrying of the orb at the coronation is a ceremonial borrowed from the Roman Empire by the Early Saxon kings. The bracelets as an ensign of royalty find record in the Holy Scriptures and it may easily be guessed that the spurs are the emblems of chivalry.

The Regalia of England have had a chequered and adventurous existence, but we have only room to refer very briefly to two incidents in connection with them. During the reign of Edward I the royal treasures and regalia were kept in the Royal Treasury in Westminster. The monks, or some of their number, succeeded in getting into the treasury and carrying off a greater portion of the treasure, and some valuable silver plate, and the crown jewels were scattered all over the floor of the Treasury. The regalia have since then had several places of custody till now they rest in the Jewel-House in the Tower. In 1671, a daring attempt to steal the crown was made. About that time the crown jewels were thrown open to public inspection on payment of a fee in order to supplement the emoluments of the Keeper of the Regalia whose salary had been reduced. The records of the time, such as the *London Gazette* and Evelyn's "Diary" contain a description of Blood's dastardly attempt, in concert with Perrott and others, to steal the crown, sceptre and orb Perrott and Blood were captured and brought before King Charles II at Whitehall; but with great effrontery Blood managed to secure a pardon.

Every school boy, even less of prodigy than that of Macaulay, knows of the existence of the Stone

of Scone in the coronation chair at Westminster, its mythical origin and the legend attached to it. Sir Herbert Maxwell in one of a series of articles appearing in a local contemporary has dealt at much length with the story of this stone as well as the older one at Kingston—on which the Early English Kings used to be crowned which also possesses peculiar claims to regard. Adjoining the stone at Kingston there used to be a chapel which contained effigies of the Anglo-Saxon kings who had been crowned there and also of King John who gave the inhabitants of the town their first charter but these were destroyed when the Chapel collapsed in 1730. The following may be given as the names of the kings who were crowned here:—Athelstan, Edmund, Edred, Edgar, Edward the Martyr, Ethelred II and Edmund II. The stone formerly stood against the old Town Hall wall and was afterwards removed to the courtyard of the Assize Court where it lay preserved but unnoticed till 1850 when a Committee was appointed to select a suitable place for its preservation. The stone was placed on a septagonal block of stone, standing in the centre of seven stone pillars, connected by a railing moulded after a design presumed to be characteristic of the period. These pillars and the septagonal form of the stone are in allusion to the seven kings crowned in the town. It may be here mentioned that His Majesty the King authorised a special celebration on Coronation Day to be held at Kingston and this was done at the end of last month.

There is nothing in connection with the coronation of the king of England so interesting, once in these modern days, we get behind the apparent ludicrous idea of the services offered, and consider what they signify. In the days of old when the coronation of kings was hedged around with 'pomp and circumstance,' a great many of the subjects held their fiefs on the tenure of performing some personal service at the coronation. In many cases they were almost menial, but in every case they had their value as showing how every man of them held his fee according to the ancient customs of the land. That is one reason why in modern times, when many of the obsolete services are dispensed with and the prescriptive right to offer the services is never waived. It follows naturally in the course of years that the land which is held on these peculiar tenures passes from the original family to some collateral branch of it and then there has always to be a decision given if the tenure continues in this branch of the family. Moreover, at every coronation there has to be a decision made as to what services will be accepted and which waived, and this duty is undertaken

by the Court of Claims on which body has devolved the duties and prerogative attaching to the office of Lord High Steward of England. The Court of Claims appointed by His Majesty to decide upon the claims advanced at His Majesty's Coronation finished their labours some time ago. The majority of the obsolete services illustrating the manners and customs of bygone ages have been waived. It would take up too much space to set out even briefly a list of those which have been allowed; but one may be mentioned and that is the claim of the venerable prelate the Archbishop of York, once an officer in the Madras Army, to crown the Queen. The prerogative of crowning the King by person or by deputy belongs to the Primate of England, the Archbishop of Canterbury and in ancient days there is an authentic instance of the danger of ignoring these privileges. In the early days of the Norman and Plantagenet dynasties when the kings' tenure of the throne was never too secure if he could not fight for it, and when there was no guarantee that a king's son would succeed him, it was the custom to try and secure the allegiance of the people by crowning the heir-apparent during the life-time of his father. Henry II had this done and ignored his *bête noir* Thomas à Becket by getting the Archbishop of York and the Bishop of Durham to perform the ceremony. Becket retaliated by getting these two prelates excommunicated. To-day there can be no excommunication; but the Archbishop of York's privileges are gracefully allowed by the Court of Claims.

An impression prevailed that the ceremony of the challenge issued by the Kings' Champion, a privilege held by the Dymocks as Lords of the Manor of Scrivelby was to be waived; but recent news from England shows that the interesting if useless ceremony is not to be done away with but will be revived in all its fulness.

In view of the gorgeous pageantry that, within bounds, will surround the coronation procession of our King, there is little need to go back at this period at least to the past; but as we have said at the opening of this article the incidents in connection with coronations have been innumerable. A few selected at random may prove of interest. It is not, however, our intention to delve too deep for fear of burdening the narrative: To commence with the Tudors therefore, Henry VII, as has already been stated, was practically crowned on Bosworth Field; but of the gorgeous coronation of Henry VIII and Catharine of Aragon the records are scanty. At the coronation of Edward VI. the Bible was for the first time presented to the king, a rule which has been continued ever since Lady Jane Grey, poor deceived mortal, though

proclaimed queen was never crowned. A curious incident at the coronation of Mary, the first female sovereign to rule over England in her own right, was the presence at the coronation of Anne of Cleves, one of the divorced consorts of Henry VIII. Queen Henrietta Maria, consort of Charles I. refused to be crowned or even to attend the ceremony owing to her religious scruples as a Roman Catholic. On the other hand, the leading feature of the coronation of William and Mary was the double ceremony with double regalia and two sets of officers of the Royal Household. Anne's consort, Prince George of Denmark, was excluded from any share in the dignities of her coronation. In this connection a memorable incident was the exclusion of Queen Caroline from the coronation of George IV, a full account of it will be found in the book, and the least that can be said of the disgraceful incident is that it reflected badly on the character and manliness of the so-called "First Gentleman in Europe."

The form of the coronation oath has been the subject of protest in the present day by the Roman Catholics who naturally resent the very scornful manner in which the head of their church is referred to in the oath, and in deference to popular opinion a Bill was introduced into Parliament to modify the formula. For some reason the matter was dropped, and a recent pronouncement from Mr. A. J. Balfour in the House of Commons seems to indicate that there is no intention of carrying the matter any further.

In these matter-of-fact days we can afford to disregard such things as omens though an interesting chapter in "Crowns and Coronations" deals with these; and we can only trust that those who do believe in them will see only good omens in the coronation of our King.

The following note on "Coronation" is taken from the Modern Encyclopedia of Universal Information:—

Coronation, the placing of the crown on a monarch's head with solemn rites and ceremonies. Part of the ceremony usually consists in the oath which the monarch takes, that he will govern justly, will always consult the real welfare of his people, and will conscientiously observe the fundamental laws of the state. In England kings have been anointed and crowned in Westminster Abbey, even to the latest times, with great splendour. The form of the coronation oath is that settled after the revolution of 1688. The Archbishop of Canterbury puts it to the sovereign, who swears to govern according to the statutes of parliament, to cause law and justice in mercy to be executed, and to maintain the Protestant religion.

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WOMEN OF THE VICTORIAN ERA.

REMARKABLE for development in every respect as the Victorian era was, in none was it more so, than in that of the women of the country. The reign of our late beloved Queen-Empress Victoria was marked by intellectual and moral growth in the nation such as never before were known to develop within the short space of less than sixty four years. In fact, it seems almost impossible to believe that such strides have been made in the world's progress as have actually been accomplished during the Victorian era.

In no direction has improvement been more marked or general than in that of the status of women. Of course, in the very earliest times there were solitary examples of women who took the lead in affairs of state and who were as accomplished in learning as men. But these were notable exceptions, and for many reasons it is as well that they were not more common, for in several respects they were unpleasant. Power was perverted into tyranny, and learning was suborned to basely ignoble ends only too often, when wielded by unaccustomed hands. It is self-evident on physiological grounds alone that woman will never conquer in the long run if she struggles for pre-eminence with man. The mere fact that the male brain weighs on an average five ounces more than the female one gives men an immense advantage over women such as will not be lightly overcome, let alone the fact that for countless generations man's has been the ruling sex whilst woman's has been the subordinate one, and the laws of evolution have worked out their fulfilment accordingly.

One sex must be the ruling one and this is man's. But on the other hand, man's would be a sad fate indeed were he condemned to be linked to a creature markedly his inferior in every respect. Yet it is only within a very few years that any attempt has been seriously made to bridge the gulf which placed men on a level

so high above that occupied by women and to develop the latter into reasonable creatures, fit indeed to be "help-mates" to the former.

There can be little doubt that one very great factor which tended to bring about the change for the better in the position of women was the fact that England was ruled successfully for so many years by a woman. The very fact that the head of a mighty kingdom,—not then, as now, an Empire,—was one of the gentler sex, tended, no doubt, to make the position of British woman a better and more assured one. The members of the sex to which our late beloved Sovereign belonged felt that they had an illustrious example all worthy of emulation,

"In her as Mother, Wife and Queen."

Indeed it may well be said of her that,

"She wrought her people lasting good"

on the one ground alone that her noble example tended to elevate her whole sex, for whom, truly in the very best sense she made,

"The bounds of freedom wider yet."

To fully realize the extraordinary difference between woman's position now and what it was at the beginning of the Victorian era, one has merely to contrast the heroines of the average novel written in 1837 or thereabouts with those of a story of the present day, and novels, it must be acknowledged, are very fairly faithful mirrors of the times. About 1837 the women held up for admiration were pretty, foolish, wasp-waisted, often untruthful creatures, whose one method of showing emotion was by swooning or a fit of hysterical tears. They were capable of a sort of milk-and-water affection, or occasionally of a weak, and generally utterly misplaced affection for some member of the opposite sex, but being help-mates to their husbands, or leaving some small portion of the world a little better than they found it was an idea that never by any chance occurred to them. Now this is changed, for it is recognized that women have serious work to accomplish in their lives, and that merely to look pretty is not the be-all and end-all of their existence, and their standard

of honour is now, theoretically at least, as high as that of a man.

Of course higher education is largely answerable for the vast improvement which has taken place in the intellectual and consequently moral development of womankind. Formerly "a young gentlewoman" was taught to read, though probably the only use to which she put the accomplishment was to plod through a portion of Scripture and a recipe or two in her cookery-book on weekdays, and to read her prayer book and a sermon on Sundays. Occasionally, if she had literary yearnings she read some very feeble poetry and a few volumes of exceedingly trashy romances. She learnt of course to write, but though her handwriting was often elegant, the spelling and grammatical construction of her letters left much to be desired. The use of the globes, terrestrial, celestial, was acquired, and the outlines of English history were taught her, also a smattering of the Italian language. She could cast accounts, if they were sufficiently simple, without any very great difficulty. She learnt to tinkle more or less ineffectually on the harp and piano, she sang a little, she sketched in water colours with an absolute disregard of the rules of perspective or the laws of nature. She perpetrated atrocities in Berlin wool work, and she did fine sewing most daintily and beautifully, and this was too often the sum total of her accomplishments. Of course there were fortunately exceptions to this rule, but it must be acknowledged that they *were* exceptions and *not* the rule. As for the working women, they were either totally uneducated, or else, had merely a bowing acquaintance with three R's.

Nowadays, girls of the upper middle class generally are as well educated as the average man in their station of life. They ordinarily have a very thorough knowledge of the grammatical construction of their own tongue, and can read and write and often speak both French and German fairly correctly and easily, besides being taught at least sufficient of the elements of Greek and Latin to help them to under-

stand the basis of other languages. They have a practical working knowledge of arithmetic and algebra, and very often of higher mathematics. The rules of harmony are taught with music, and those of perspective with drawing, and indeed every effort is made to teach so as to develop the intellect of the pupils, so that they shall not learn parrot fashion, but with understanding. Physiology, geology, botany, natural history and chemistry, form part of the curriculum at all large schools. Also, the health of the pupils is properly looked after, gymnastics and a healthful amount of exercise are encouraged, and a girl is no longer admired for being delicate, but pitied. As for the working classes, free education is open to all, and of so thorough and excellent a quality is it that girls who a hundred years ago would have been working on starvation wages as field hands or domestic servants, are, under the present regime, drawing good salaries as teachers, government clerks, telegraphists, short hand writers and typists, newspaper correspondents, and in many other useful and remunerative ways.

Therefore it is not surprising that the women's roll of honour during the Victorian era is so long and glorious a one, comprising as it does writers, artists, travellers, nurses, and philanthropists, all of whom have done excellent work in their day, much of which, it is to be trusted will endure to the end of time, for theirs has truly been,

"A glorious helpful ministry—
The contact of the soil and seed,
Each giving to the other's need,
Each helping on the other's best,
And blessing each, as well as blest."

Amongst those women who have been foremost during the Victorian era in promoting the good of their kind, may be mentioned the Baroness Burdett Coutts, a true philanthropist. Miss Angela Georgina Burdett was born on April 21st, 1814. Her father was Sir Frances Burdett. In 1837 Miss Burdett inherited the large property of her grandfather.

Mr. Thomas Coutts, a banker, and took his name in addition to her own. Never was wealth put to better use than that of Miss Burdett Coutts. Besides spending large sums of money in building and endowing schools and churches, she has endowed the Bishoprics of Cape Town, Adelaide, and British Columbia. She has effected great improvements and reforms in teaching girls at the national schools, and has established a shelter and reformatory for the most helpless and forsaken class of women, the cause of her own sex having always been very near to her heart. In South Australia she has founded an establishment for the improvement of the condition of the aborigines. In 1871 Government conferred a peerage on Miss Burdett Coutts, in grateful recognition of her valuable services in the cause of humanity. In 1873 the freedom of the city of London was conferred upon the Baroness, and in 1874 that of Edinborough. She has given several fountains to the city of London, besides building there in 1870 the Columbia Market in Bethnal Green, which supplies fish at a low rate to those who live in this very poor district. Also she built Columbia Square, a set of model dwellings capable of accommodating about three hundred families. These rooms are rented at very cheap rates, and it would be superfluous to dwell on the inestimable benefit it is to the poor to have proper and cheap places to live in, instead of being obliged to herd together in absolute dens which are breeders not only of disease but of even worse evils. In 1877 the Baroness instituted the Turkish Compensation Fund. Ten years later she established a fishing school at Baltimore in Ireland. Space forbids fuller details of her many good works, but it may be noted that the Baroness has many times helped large numbers of people to emigrate to other countries where they may live more comfortably and happily than they could in overcrowded England, and has contributed largely to the People's Palace, and is a generous patron of Art. In 1881 the Baroness Burdett Coutts married Mr.

William Ashmead Bartlett, who assumed her name by Royal Letters Patent the following year.

Perhaps no name is more revered by the British nation than that of noble Florence Nightingale. She was born in May 1829, and was the daughter of a wealthy man, Mr. William Edward Nightingale of Embley Park in Hampshire, and Lea Hurst, Derbyshire. He was one of the earliest men to see the importance of educating girls thoroughly well, and it is owing to his training that his daughter was so well fitted for the part she afterwards fulfilled in life. He taught her mathematics, classics, and modern languages, and inculcated in her habits of order and method. At a very early age Miss Nightingale toured all over Europe visiting the different hospitals. In 1851 she began her training as a nurse in the Institution of Protestant Deaconesses at Kaiserworth on the Rhine, and later studied under the Sisters of St. Vincent de Paul at Paris. On her return to England she put into working order the Sanatorium for governesses in Harley Street. In 1854, when the terrible Crimean War was engaging our forces, and men were dying by hundreds for want of proper care, she at the head of a band of thirty-four nurses left England on October 21st, to do what she could to relieve the sufferings of our wounded soldiers. She arrived in Constantinople on November 4th, the eve of Inkerman, and found that there were already over two thousand three hundred patients in the wards of the hospital. This number rapidly increased as the war raged its course, so that at one time Miss Nightingale had ten thousand men under her care. The strain and anxiety were indescribable, but her gallant patience never flagged, and day and night she was at her post, often standing for twenty-four hours at a stretch. Worn out with work and responsibility, Miss Nightingale was prostrated with fever in the spring of 1855, but she resolutely refused to quit her post at the hospital in Scutari till Turkey was evacuated by the British on July 28th 1856. From her experience gained in this war Miss Nightingale

in 1857 furnished the Commissioners appointed to enquire into the regulations affecting the sanitary condition of the British army with most valuable details. Her advice was further embodied in the notes which she added to the report of the Commissioners appointed to enquire into the sanitary condition of the army in India in 1863. American and European Governments have all sought Miss Nightingale's advice on the subject of Army Sanitation, and never in vain. She has written valuable papers on nursing, amongst which may be mentioned "Notes on Nursing." These were two papers written in 1858, dealing with Hospital construction and arrangement; they were addressed to the National association for the Promotion of Social Science. In 1859 she wrote some further "Notes on Hospitals," which were followed in 1871 by "Notes on Lying-in Institutions," and in 1873 by "Life or Death in India." "A Note of Interrogation" appeared in 1873 in *Fraser's Magazine*, and gave expression to some of the writers' religious beliefs. Miss Nightingale received £50,000 from the nation wherewith to found a nursing order, and the late Queen sent her an autograph letter of thanks and a diamond cross. The Sultan of Turkey also presented her with a diamond bracelet. Miss Nightingale after her life of toil is now living in retirement, her health having been utterly broken owing to her exertions in the Crimean War.

One distinctive feature of the Victorian era has been the increase in the number of women explorers and travellers. Notable amongst these is Mrs. Bishop, once Miss Isabella Bird. She visited Canada and the United States of America in 1854, and has also travelled in Persia, Kurdistan, Thibet, the Sandwich Islands, Corea, and amongst the aborigines of Yezo. She has contributed considerably to contemporary literature. Amongst her works may be mentioned "An English Women in America," written in 1858; "Six Months Among the Palm Groves of the Sandwich Isles," in 1876, "A Lady's Life in the Rocky Mountains" in

1879; "Unbeaten Tracks in Japan in 1880," and "The Golden Chersonese" in 1883.

Miss Mary Kingsley was another celebrated woman traveller. Africa was the field of her researches, and she did valuable scientific work in natural history, particularly in the study of fishes. In fact, she received a commission to report upon the various species of fish found in the African rivers, a work in which her spirit of ardour and enterprise proved most useful. She discovered at least one new species of fish, which was named after her. She wrote of her African experiences in a couple of delightful books of travel, describing her undertakings with a keenness of observation, bright wit, and cheery bravery and disregard of discomfort and danger which stamped her as a worthy member of the talented family to which she belonged. She died in Africa about a year ago having contracted fever whilst devotedly nursing sailors who had been wounded or who had fallen ill during the South African war. She was only a little over thirty years old, but in her short life had accomplished more useful work than is done by many during a far longer period.

Although born on December 26th 1780, the name of Mary Somerville can hardly be omitted from the list of the great women of the Victorian Era, so as much of her work was done during this period. She was the daughter of Admiral Sir William Fairfax, and was brought up in Burntisland and Edinburgh, leading a somewhat secluded family life. It is said that a mathematical problem in a fashion paper first led her to take an interest in the subject in which she afterwards became so famous. In 1804 she married her cousin, Captain Greig of the Russian Navy, the Russian Consul in London, but it was not till after his death in 1806 that she was able to devote herself to scientific study. In 1812 Mrs. Greig married another cousin, Dr. William Somerville, the inspector of the army medical board, who encouraged and helped her to study. In 1823 Mrs. Somerville

was asked by Lord Brougham to popularise Laplace's *Mecanique Celeste*, and in consequence in 1830 the *Celestial Mechanism of the Heavens* was published, and met with great and deserved success. In 1835 a royal pension of £ 300 per annum was conferred upon Mr. Somerville, who in the same year published *The Connection of the Physical Sciences*, and in 1848 *Physical Geography*, followed in 1866 by *Molecular and Microscopic Science*. She died at Naples on November 29th 1872. Her name has been perpetuated in a famous college for women,—Somerville College, Oxford, which was founded in 1879.

Many women have during the past reign done valuable scientific work, though none of them perhaps have made discoveries equal to those achieved by men. Still, it is a thing to be justly proud of that a woman has within the last few years lectured before the Royal Society, this having been done by Mrs. Roberts Austen whose subject on the occasion was "The Whistling of the Arc Lamp."

One of the most remarkable women writers of the Victorian era was Harriet Martineau, who was born on June, 12th 1802, and who was the daughter of Thomas Martineau, a manufacturer living at Norwich. She received a good classical education and was a diligent and conscientious worker in her school days, though not then displaying extraordinary talent. Her first appearance in print was made in 1821, when she contributed an article to a religious periodical, *The Monthly Repository*. This was followed by other articles, and short stories dealing with machinery and the working classes. In 1829 the failure of the house of business in which her money, and that of her mother and sisters was placed, rendered it necessary for Miss Martineau to earn her own living. Her health was bad, and she was deaf so that many ways of earning a livelihood were closed to her, but literature remained. In 1830 she wrote *Traditions of Palestine*, and also gained three prizes for three Theological essays written for the Unitarian Association. In the following year she was desirous of writing a series of stories as *Illustrations*

of *Political Economy*, and despite discouragement from publishers the first numbers of these tales was brought out early in 1832, and met with instantaneous success, five thousand copies being called for in the first fortnight after publication. From this date Harriet Martineau's money troubles were over, for she could dispose advantageously of all her work. Her health was very bad indeed for many years, but in 1844 she derived immense benefit from hypnotism, and remained far stronger than she had ever been before till her death which took place on 27th June 1876. Despite being for so many years an invalid Harriet Martineau's literary output was enormous. After a visit to America during 1834 to 1836 she published *Society in America*. In 1839 appeared *Deerbrook*, a novel. She also wrote *The Hour and the Man* four volumes of tales for children, *Life in the Sick Room*, *Forest and Game Law Tales*, *Eastern Life*, (on her return from journeying in Egypt and Palestine), *Household Education*, several biographies, and her own autobiography. Besides this she in 1849 completed Night's *History of the Thirty Years Peace*, and in 1853 translated and condensed Auguste Comte's *Philosophie Positive*, and in 1851 in conjunction with Mr. H. G. Atkinson wrote a *Series of Letters on the Laws of Man's Social Nature and Development*. For many years too she influenced thousands of people by her writings for the press, which were voluminous. As an educator and teacher Harriet Martineau has probably never been equalled, her influence being extraordinarily wide and far-reaching, and, though her agnosticism caused her to be looked upon askance by the narrow-minded and unco guid," it, cannot be denied that she sought the greatest and truest good of all that of humanity, with a perfectly earnest and disinterested spirit.

The very greatest woman novelist that England has ever seen was undoubtedly Mary Ann Evans, famous throughout the English-speaking world as "George Eliot." She was the daughter of a Warwickshire land agent, was born on November 22nd 1819; and

died on December 22nd 1880. She was more highly educated than most girls of her class, and learnt music, German, and Italian, being also a voracious reader. "George Eliot" did not begin to write novels till she was thirty seven years old, but did a great deal of literary work before then. In 1844 she began to translate the *Leben Jesu* of Strauss, and in 1850 contributed to the *Westminster Review*, of which she became assistant editor in the following year. The only book to which she appended her real name was a translation of Fuerbach's *Essence of Christianity*. In 1856 she wrote her first story, *The Sad Fortunes of the Rev. Amos Barton*, which met with instant appreciation on its appearance in *Blackwood's Magazine* in January 1857. *Adam Bede* appeared in 1858, and *The Mill on the Floss*, *Silas Marner*, *Romola*, and *Felex Holt* between that date and 1866. *Middlemarch* and *Daniel Deronda* in 1871. Her most notable poems were *The Spanish Gypsy* (1868) *Agatha*, *the Legend of Jubal*, and *Armigart* (1871.)

"George Eliot's" genius was distinctly of the masculine order, she had a grasp of thought and power of description which has been equalled by few other writers. Her accuracy and scholarship were invaluable in the translating work which she did, besides standing her in good stead for her novel writing. Her views of life were sombre and this increased as she grew older. In her writings she invariably laid stress upon the fact that the path of duty was the one to be followed, though she was too truthful to pretend that it was one which brought comfort to one's self, knowing as she did that this was not the case. Despite a certain diffuseness and almost Johnsonian mannerism of style which grew upon her more and more in later years, George Eliot's works stand out as truly great, bearing upon them the stamp of real genius, and containing as they do many noble or beautiful thoughts. Her books are in themselves eloquent witnesses to the fact that she was the friend of many of the clearest and most advanced thinkers of the time, who delighted to gather round her.

Charlotte Bronte, who was born on April 21st, 1816, and who died on March 21st 1855, struck a new note in fiction with her novel of *Jane Eyre*, published in 1847. The book was a daring one, for it dealt with subjects usually tabooed to 'the young person,' but withal they were dealt with in so right a spirit that no harm, but rather good, was done by it. Charlotte Bronte was one of the first to introduce a new kind of heroine, namely a woman of few personal attractions, but possessing a heart and brain worthy of the name, and who was ruled by conscience instead of being swayed by every ignoble impulse of the hour. Charlotte Bronte also wrote three other novels, *The Professor*, *Shirley*, and *Villette*, besides a volume of poems in conjunction with her sisters Emily and Anne. Emily wrote a novel entitled *Wuthering Heights*, marvellously powerful and lurid in description, but died too young for her genius to fully ripen.

Miss Charlotte Mary Yonge, who was born in 1823 and died in 1901 did a vast amount of literary work of a very high order. Between 1848 and 1892 she published at least a hundred and twelve volumes, besides translating and editing several books and being the editor of the *Monthly Packet*. Her writing was very pure in tone, and she inculcated high principles. Her *Heir of Redcliffe* (1853) and *The Daisy Chain*, influenced thousands of English girls. The fault in Miss Yonge's teaching, as was pointed out in one of the leading reviews shortly after her death, was, that she propagated the doctrine that it was right to marry on absolutely insufficient means, without regard to the future, and that apparently enormous families were her ideal whether the parents had the wherewithal to educate them properly or no. Miss Yonge's historical novels are, it will be agreed by most people, undoubtedly better than her stories of modern life. Amongst her excellent historical stories may be mentioned a *Chaplet of Pearls*, *The Dove in the Eagle's Nest*, *The Laged Lion*, *The Changeling*, *Unknown to History*, and *Two Penniless Prin-*

cesses. She also wrote several books on history and some biographies. She did an immense amount of good with the money she earned by writing, helping the poor of her native village Otterbourne in Hampshire (where she lived and died), and fitting out the missionary schooner the *Southern Cross* for Bishop Selwyn with a portion of the profits from *The Heir of Redclyffe*. With the profits of *The Daisy Chain* she built a missionary college at Auckland, New Zealand. Her memory has been perpetuated by a scholarship founded in Winchester Girls' High School, and named after her, a fitting memorial to one who always interested herself in the higher education of women, and who was herself intellectual and accomplished in a high degree.

Mrs. Gaskell, whose maiden name was Elizabeth Cleghorn Stevenson, and who was born on September 29th 1810, and died on November 12th 1865, enriched English literature by a series of delightful novels, written, but not obtrusively so, "with a purpose." The language is pure, and the aim and thoughts high, and free from all taint of bigotry. Her books were—*The Moorland Cottage* written in 1848, *Cranford* and *Ruth* in 1853, *North and South*, in 1855, *Round the Sofa*, in 1859, *Right at Last*, in 1860, *Sylvia's Lovers*, in 1863, *Cousin Phillis* and *Wives and Daughters*, in 1865.

Mrs. Oliphant, whose maiden name was Margaret Wilson, is another Victorian novelist who did excellent work, in recognition of which she was awarded a Civil List Pension of £ 100 per annum in 1868. Her stories were for the most part of Scottish life and character and were simple, natural, and interesting, though it would be too much to say that they contained a spark of real genius. Amongst her most popular books may be cited, *Chronicles of Carlingford*, *A Country Gentleman*, *Kirsteen*, *The Wizard's Son*, and *The Beleaguered City*, but she wrote about forty other novels, besides some valuable biographies, chief of which is *The Life of Laurence Oliphant*. She also wrote some delightful

books in which her knowledge of history stood her in good stead, as examples of which may be quoted *The Makers of Florence*, *The Makers of Venice*, and *Historical Sketches of the Reign of George II.* Mrs. Oliphant died within the last few years, having worked to the last, though worn out by illness, a noble example of Victorian womanhood.

Undoubtedly the greatest woman poet of the Victorian era was Mrs. Barrett-Browning, who was born on March 8th 1806, and died on June 30th 1861. She began to write at a very early age, but her first published work was an *Essay on Mind and other Poems* which appeared in 1825. In 1838 she wrote *The Seraphim and other Poems*, and in 1844 another volume of poems which contained the famous *Cry of the Children*. After her marriage to Robert Browning in 1847, Mrs. Browning went to Italy with him, and a new influence may be observed in her poems from this date. In 1850 she published a new volume of poems and a translation of the *Prometheus Bound* of Æschylus. In 1851 appeared what may be considered as her *magnum opus*, a novel in verse *Aurora Leigh*. She also wrote some other poems, which were published after her death, and contributed some prose papers to the *Athenæum*. Mrs. Browning possessed true genius and her *Sonnets to the Portuguese* are amongst the very best love poems ever written in the English language. There are some very beautiful lines also in *Aurora Leigh*, and Mrs. Browning is particularly happy in describing child life. Her thoughts are grand, though sometimes obscure, but whatever her defects, there is no doubt that Mrs. Browning was a genius, who left the world of literature considerably richer than she found it.

Such are a few women of the Victorian era, of whom and of whose work it is however quite impossible to give any adequate idea in the confined space at my disposal. A new order has sprung up, and the face of things has been much changed by it. Women now manage their own theatres, publish their own books and magazines, take charge

of different institutions, and in fact work side by side with men in many walks of life. It has been urged that they do not always do so with discrimination. This is true, but it must be acknowledged that it takes some little time to strike a golden mean, and sixty years is a very short space in which to find a proper level between practical slavery and almost absolute independence.

I have referred but briefly to some of the most brilliant spirits of the Victorian age, having been unable to do more within the limits of this paper. Still it must be noted in conclusion that the list I have given is by no means inclusive, for I can only barely mention the names of such women as Lady Henry Somerset, Sister Dora, Frances Power Cobbe, Miss Agnes Weston ("the Sailor's Friend") Mrs. Lynn Lintou, and other workers of the kind. Also it must be remembered that women during the late reign have distinguished themselves in art, amongst them being Mrs. Thorneycroft, the sculptor, Elizabeth Southerden Thompson (now Lady Butler) the famous battle-painter as well as many others. Last, but not by any means least, have come prominent educators of women, foremost amongst whom may be mentioned Miss Mary Frances Buss, who founded the North London Collegiate School for girls, and Miss Beale, Principal of Cheltenham Ladies College.

Truly the women's record during the Victorian era is a glorious one.

K. M. BEGGIE.

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MODERN BENGALI LITERATURE.

PERHAPS in no other respect has the influence of English civilisation been more conspicuously felt and the progress of Western enlightenment more markedly exhibited in Bengal than in the growth of its language and literature in the course of the last half a century. Bengali literature before the time of Raja Rammohan Roy consisted chiefly of poetry, dramatic and lyric, the former being more or less faithful translations of the great Hindu epics, Ramayana and Mahabharata, and one or two original productions like those of Mukaundaram and Bharatchandra, and the latter comprising the exquisite amatory and devotional songs of Vidyapati, Chandidas and other Vaishnav poets who flourished about the time of the great Hindu preacher of the religion of love, Chaitanya. Bengali prose, properly speaking, commenced since the days of Raja Rammohan, and the strides which it has since made, till at present it occupies the foremost place among the Vernacular languages of India, is well calculated to fill the student of literary history with hopes about its still infinite potentialities. Raja Rammohan could hardly express all his ideas in his native tongue, but a well-educated Bengali of to-day may clothe all his thoughts on all subjects, except perhaps the material sciences, in chaste and decent Bengali without taking recourse to any foreign vocabulary. The great masters of Bengali prose, Pundit Iswar Chandra Vidyasagar, Akshay Kumar Dutt and Bankim Chandra Chatterjee, are all dead, but the work they have done is being steadily carried forward by younger men. The style at present in vogue is a mixture of the English and the Sanskrit, but the words are as far as possible borrowed from the latter, as it is the mother of all Indian (Aryan) languages, and possesses great flexibility and an extensive vocabulary. In poetry, English forms and metres, such as the Sonnet, the Alexandrine and the Blank verse, have been introduced with

great success, and the greatest poet of modern Bengal, Michael Madhu Sudan Dutt, adopted the latter form of versification in his grand epic, *Meghanadabadha* (the fall of Meghanada). In prose, English turns of thought and expression have largely supplanted the quaint diction of our forefathers, in which pedantic verbosity predominated over sense. Similarly, Sanskrit words, inflexions, compounds, and metres have been largely incorporated in the modern Bengali.

Thoughts and sentiments which were unknown to the people half a century ago, have now become the common property of the educated classes, and are already leavening the half-educated masses. These ideas have to be expressed in words, and the language has thus received an elasticity and versatility which would, we believe, be difficult to match from the history of any other literature during the same period. In his celebrated minute on Indian Education, Macaulay said that a single shelf of a good English library is worth the whole mass of Oriental literature. The statement was not perhaps so much of an exaggeration at the time it was made so far as the Bengali literature was concerned. But at the present day it is certainly possible for a Bengalee gentleman to be well-educated by a study of his native literature alone and find full satisfaction therein for his higher intellectual cravings, at least as regards polite literature; though it must be admitted that for all-round culture it is yet necessary for him to study some modern European language.

Let us now look a little into facts and figures, and see how the case of Bengali literature stands at present. Here is a summary of the non-educational books received at the Bengal Government Library during the third and fourth quarters of 1900 and the first and second quarters of 1901.

[Vide Appendix, Calcutta Gazette, Jan. 30., April 3, July 10, and Sept. 25, 1901]. In certain groups of the following list (E G. 5, 6, 10, 12) educational books form the vast majority, but as they are not intended for general readers we omit them from calculation.

Year, and Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Art.	2	7	20	26	5	1	2	7	0	24	52	0	0	36
Biography.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Drama.	0	8	25	16	1	0	1	9	1	16	85	1	0	30
Fiction.	0	6	20	10	2	2	0	6	0	26	86	9	0	26
History.	0	23	85	86	9	5	1	24	1	83	262	1	1	127
Language (Philology &c.)	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Law.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Medicine.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Philosophy.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Poetry.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Religion.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Science.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Travels.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Miscellaneous.	0	2	20	34	1	2	1	2	0	17	39	0	1	35
Total for 12 months (July 1900—June 1901).	3	23	85	86	9	5	1	24	1	83	262	1	1	127

It will be seen from the above summary that Biography, Drama, Fiction, Medicine, Poetry and Religion are fairly well represented. Nor is the annual outturn of historical literature altogether bad. But Art and Science seem hopelessly in the back ground, as no doubt they really are in this country. Again, it should not be supposed that all the books above enumerated are ~~able~~ to adorn the library of a man of culture. Of course there are books and books. In the 11th group, Religion, for instance, many of the books are indifferently written Christian tracts. But even making due allowance for bad and indifferent productions, it cannot be denied that Drama, Fiction, Poetry and Religion are well-cultivated. The miscellaneous group comprises essays, books, and songs on various subjects, political, social, religious, domestic and commercial. One important work classed in that group is the *Biswa-Kosha* or Dictionary of universal knowledge, an Encyclopædia of learning and a monument of literary genius running into many volumes.

The following table, summarised from the Bengal Library catalogue of books for the 2nd quarter 1901 (vide Calcutta Gazette, Sept. 25, 1901), will show the number and nature of Bengali periodicals.

1	2	3	4	5	6	7	8	9
Agriculture.	Art.	Education.	Medicine.	Poetry.	Religion.	Science.	Miscellaneous.	Total.
1	1	1	2	1	7	1	40	54

Some of those in the 8th group are for children, some are conducted by ladies for ladies and many of them are beautifully illustrated.

Besides these, there is one Bengali daily and over a dozen weeklies published in Calcutta, one of the latter, the *Bangabashee*, boasting of circulation of over twenty thousand copies. In addition to these, almost all the mofussil towns of Bengal have got hebdomadals of their own.

There are two literary academies in the metropolis, counting among their members the most celebrated authors and learned men of our country. One of these, the *Bangya Sahitya Parishad* (the Bengal Academy of Literature) has undertaken the difficult but useful task of fishing out and redacting the works of all ancient Bengali authors. The proceedings of the meetings of these learned bodies form most interesting reading. Whenever a new manuscript, coin or copper-plate bearing upon the history or philology of the Bengali language is discovered or unearthed, the members of the academies meet together to discuss it with scientific accuracy and earnestness. Essays on literary, scientific and historical subjects, showing a great deal of research and learning, are read before these assemblies, and if approved, published subsequently in their magazines.

The drama has been revived, and here again, the model adopted is a combination of the Western and Sanskrit styles. There are four or five theatres in Calcutta, and several others in the mofussil. The stage and the auditorium are fitted up in European style, but the dress is adapted to oriental subjects. The female parts are acted by public women, with great skill and ability no doubt, but greatly to the detriment, it is to be feared, of the morals of our young men. In the mofussil theatres, however, the fair sex is represented by male actors. With the establishment of the drama as a popular institution, dramatic literature has received considerable encouragement, and the Hind mythology is ransacked to furnish fresh and ever-varied subjects for the lovers of the stage. Society-sketches, melodramas, farces and pantomimes serve as a sauce to more serious subjects, Bab Amrita Lal Bose, the able manager of the *Star Theatre*, being a masterhand in the production of such comic pieces. There are two illustrated weekly papers for those who patronise the histrionic art.

To a literary student the most hopeful sign is the trend of modern Bengali literature is

penchant for subjects requiring deep study and research, such as history, biography, philology, philosophy and literary antiquities. Babu Dines Chandra Sen, B.A., has produced a work on the history of Bengali literature and language which for deep erudition and earnest research would compare favourably with similar European productions. Government has granted him a pension for writing this epoch-making book. Babu Jogindra Nath Basu's life of Michael Madhu Dutt, Babu Chandi Charan Bannerjee's Life of Pundit Isvar Chandra Vidyasagar and Babu Nagendra Nath Chatterjee's Life of Raja Rammohan Roy are master pieces of their kind. Formerly, no Bengali historian would condescend to descant on a subject less comprehensive than the history of India, or that of Bengal at the least. But now the tide has turned. Monographs on particular events, periods, districts, and places, displaying a good deal of scholarship and originality, are becoming more common. Among the leaders of historic research may be mentioned Babus Rajani Kant Gupta and Akshay Kumar Maitra. The former has written a history of the sepoy mutiny, running up to several volumes. The latter has produced a work on the much-abused Nawab Siraj-ud-dowla, in which he has conclusively shown from Government records and other reliable sources that that unfortunate ruler was more sinned against than sinning and that the notorious Black Hole affair of Calcutta is most likely a myth. Pundit Chandra Kant Tarkulankar's Fellowship Lectures on Hindu Philosophy (3 Vols.) show a deep knowledge of that abstruse subject. Besides, articles on these subjects constantly appear in Bengali monthly magazines along with others on scientific, political, and sociological subjects, and some of these would stand comparison with those published on similar subjects in England and deserve collection in book-form, and translation into other languages. One of these magazines in particular, the *Nabha-Bharat* (New India), is devoted specially to philosophic and serious subjects, and there

is no fear of its premature extinction for want of popular support.

Books on travel form another interesting feature of modern Bengali literature. Several Bengali gentlemen on their return from Europe, America and Japan publish books and write magazine articles on the countries they have visited, and the accounts they give of the men, manners, and institutions of those countries are read with great avidity. The most comprehensive book of this kind hitherto published in Bengali is Mr. Chandrasekhar Sen's *Bhur-Pradakshin* (Tour round the world). Mr. R. C. Dutt and others too numerous to mention have also written about their experiences in the west. Books on travel on the Indian Continent are also becoming numerous. Mr. S. Tagore's *Bombay Sketches* is a big bulky volume profusely illustrated with beautiful engravings. Babu Jaladhar Sen and Ramananda Bharati have written books and contributed magazine-articles on their experiences in the hitherto unexplored and inaccessible regions of the Himalayas and the Tibet, and every month the magazines are replete with descriptive articles of this kind.

In fact the best current Bengali literature is to be found in the numerous Bengali monthlies. One of the foremost of them, the *Bharati*, is under the able Editorship of Miss Sarala Ghosal, B. A., a good Persian scholar, who is doing her best to enrich her native language with the gems of that literature by translations from original sources. The reason why Calcutta is so far behind Madras in good English magazines lies perhaps in the fact that the highest and best and most original thought of our country is used up in the Vernacular magazines, leaving very little for exploitation by their English Contemporaries.

Translations from the Sanskrit, English, French and German languages also form a noteworthy feature of our current literature. Some of the best biographies, fiction and poetry of Europe have found their way in our midst by means of such translations for instance, Guy de Maupassant's

sant's short stories, Heine and Victor Hugo's poems, Moliere's dramas and the like. In this direction there is however still much more to be done, and every patriotic Bengalee hopes that the day is not distant when all the gems of European literature will be revealed before the eyes of the Bengalee reader by means of vernacular translations.

It may not be generally known outside Bengal that some of our most prominent poets and novelists are ladies, Mrs. Svarna Kumari Devi (Ghosal) B.A., Ex-Editor of the *Bhāratī*, which is now in the hands of her worthy daughter, is one of the best-known Bengalee novelists. Mrs. K. N. Roy B.A., author of the *Alo O Chāyā* (Light and shade), Girindramshini Dasi, Mankumari, Priambada Devi have all acquired a high place among our poets, and it is a significant fact that their theme is not all love, but heroic, historical, mythological, social and even political subjects have also inspired their muse.

'Books for bairāg,' calculated to rouse their interest on all good and noble subjects, are also very much in evidence now-a-days. They are generally profusely illustrated and got up in an attractive style, and found in every Bengalee gentleman's household for the amusement and instruction of the young generation just learning their alphabets.

In this hasty sketch we cannot do more than merely refer to some of the most notable living authors of Bengal. The foremost living poet Babu Hem Chandra Bannerjee, author of *Britra-Samhar* (Fall of Britra) and other poems, formerly senior Government Pleader of the Calcutta High Court, is now blind and in retirement. Government has generously given him a pension in consideration of his literary merits, several noblemen have granted him annuities, and the public have clubbed together and raised subscriptions to help him in his distress. Babu Nabeen Chandra Sen, author of the *Battle of Plassey*, *Kurukshetra*, *Amṛtabha*, and other Epic and lyric poems, is a

senior member of the Provincial Executive service. His works are full of poetic genius and patriotic fire. But the most versatile writer of the day is Babu Rabindra Nath Tagore, who has shown a remarkable aptitude, rare among literary men, of handling both prose and verse with equal grace. He is the greatest living Bengali lyric poet and composer of songs, the foremost critic and essayist, and his short stories in prose display an unrivalled knowledge of human nature and a thorough mastery of the intricacies of style and thought. But Rai Kaliprasanna Ghose Bahadur, Ex-Manager of the Bhowal Raj, is the foremost prose writer of Bengal. His 'Morning Reveries,' 'Secret Reveries,' 'Midnight Reveries,' are thoughtful and original essays on various subjects couched in powerful and vigorous language and have earned for him the sobriquet of 'the Bengali Emerson.'

Before dropping my pen I would like to make a suggestion which, if adopted, is sure to prove beneficial to the vernacular literatures of India. Bengalee scholars there are, well-acquainted with the Persian, Hindi, and Pali (Buddhist) literatures; but almost none who can claim a fair knowledge of the Marhati, Gujarati, or Tamil. There is only one Marhati gentleman, ~~mentioned above~~, long resident in Bengal, and a good Bengali scholar to boot, who nobly strives to do the little he can to bring us in contact with his native literature. We all know how vastly the modern European languages have benefited by mutual interchange of thoughts and ideas. If similarly the best that is thought and known in Bengali could be utilised by the Marhati people, and ^{the mutual benefit would be great} vice versa, ~~and as long as this~~ is not done, there will remain a great gulf fixed between ~~the mutual benefit would be great~~ the people of the different provinces. ~~Whatever~~ the province they inhabit, all Indians naturally possess a community of thought and interest, and it follows as clearly as night follows the day that the ideals, thoughts and sentiments which inspire the people of one Indian province would be likely to have greater influence upon the

people of another than any amount of foreign material. Such an interchange would justify itself by serving the best interests of the country. It would draw the Indians more closely towards one another, give them greater unity and cohesion in their political, social and moral struggles, and would probably lead to the foundation of a common language for all India like the Urdu, which was the *lingua franca* of Hindustan during Mahomedan rule. Nobody would deny that these are consummations devoutly to be wished. For this purpose the best thing would be for some of our Bengalee scholars to study the vernaculars of other provinces of India, and for a select few of the inhabitants of these latter to do the same with regard to Bengali. May I venture to hope that this suggestion shall not have been thrown out altogether in vain?

JNAN CHANDRA BANNERJEA.

YOGA MYSTICISM.

IN no age has the human mind been able to accept the conditions of this external world with perfect contentment. For this reason, it has always exercised itself upon the problem of the future. To account for the inequalities of this world, by reference to a pre-existing and a future state, to investigate the causes of our being, to know what we are and what it is that really exists, has been the aim of every philosopher ancient or modern. Various schools of philosophy have suggested different solutions, pre-eminent amongst which, stands the one suggested by the Indian Yoga Philosophy, the product of centuries of intense oriental thinking. Fitted by soil and climate for a life of contemplation, and unfettered by any dogmas of religion, Indian sages have set no bounds to their thoughts. Their thoughts have traversed regions, forbidden to those who laboured under the disabilities of religions of forms and dogmas; and in doing so have taken flights, that only half a century ago, would have disconcerted

any European mind. But, the times have changed and the efforts of men like the late Prof. Max Muller and Swami Vivekananda have done much in interpreting the Eastern to the Western mind and the West is now quite prepared, if not to adopt, at least to follow with interest the ways of thinking in the East.

The Yoga Philosophy differs widely from other existing systems of philosophy or religion. It does not tell us that there are certain ideas and sensations, which are knowable and that beyond them lies the Unknowable, into which it is impossible for us to step, and that Reason, which is our most faithful ally in the former region, refuses to carry us into the next. Nor does it tell us, that there is a Great, Just and Merciful God, who despite all these attributes of his has created this world with all the misery inseparable from it, merely for his divine pleasure.

The Yogic sages say that there is no unknowable. Everything is knowable if only we take the pains to go the right way. According to them, there is an inherent worth in Man, which it is his duty to develop. There is no existence outside himself, what exists, exists within him. No Being therefore, has created him, no Being but himself, is the arbiter of his destinies. The universe has started with two first Principles, Matter and Soul. The latter is the active, the former the passive Principle. These, as long as they remained separate, were governed by no laws and maintained their original condition. But this state of things did not last long. The active Principle had a tendency to combine itself with the other Principle, and no sooner it did so, no sooner did the soul combine itself with matter, not in one gigantic combination, but in infinite particles, each particle of the soul entering a corresponding particle of matter, than along with that combination, were born, laws, which henceforth continued to govern it. Among other laws, mention is made of a law, similar to our law of Evolution, as primarily governing this combination of Matter and Soul. According

to their theory, which so far perfectly agrees with our own theory of Evolution, this combination passes through successive stages of development until it reaches the most perfect stage known to us, viz., that of man. But here, they part company with modern scientists. They assure us that this process of Evolution is not an indefinite process. It is bound to terminate in the separation of soul from matter and a return to the original condition of the Universe, which may technically be termed the emancipation of the Soul from the thralldom of Matter. Though this is found to occur in the course of things, no one can predict the time with any degree of certainty. Millions of years may pass away, before any given individual can be free. But these philosophers say that it is in the power of man to facilitate this emancipation, which therefore ought to be the goal of every rational being. The creation below humanity is incapable of making any conscious effort towards the attainment of this object. But man who is in a superior stage of evolution can do so. The Soul is free; though having involved itself with matter it has made itself amenable to the laws that are the heritage of their combination. The law of pleasure and pain exercises a great amount of influence upon us. We live in terror of the physical and moral codes. Every action of ours must conform to them. Every infringement is sure to meet with its punishment in the shape of pain. But we can escape all this if the Soul is freed, if but once it is made to see its own strength and independence. Then the charm loses its power and we rise, god-like, above the laws that govern this Universe.

The Yogees therefore, taking advantage of the knowledge of the conditions under which this combination took place and of the laws that govern it, suggest a method which puts it into the power of every individual to resolve this combination, so far as it is represented in himself, into its component elements without his having to wait for its natural end. It assumes that during all these peregrinations of the soul from one form of matter into

another, it has never changed its own form or substance. It has only forgotten itself. Its connexion with matter, has entailed upon it self-oblivion. To rouse it out of this Lethe, it is proposed to call in the assistance of the mind. The mind is not composed of the substance of the Soul. It is only a manifestation of Matter, though its finest manifestation. Almost etherealized, it eludes the grasp of the anatomist. But it is the nearest link in the chain that binds the Soul to Matter, for, the mind is the mirror upon which all the passions are reflected and the Soul catching these reflections, forgets that it itself is independent, forgets that it is different from Matter, and makes itself miserable. We are therefore to prevent these hostile rays from reaching the mind. The mind has been accustomed to a multitude of thoughts, which can not be stopped in a moment. The practice of disinterested virtue is inculcated, because it stops half their number. Besides, an elaborate course of practices has been recommended the chief principle underlying which is the gradual narrowing of the vision of the mind, until it can shut out all external objects at will and concentrate itself upon one idea alone. Then the Yogee achieves his object: the Soul regains its native freedom.

This is a very brief outline of the doctrines of the Yoga philosophy, the ancient idealism. We are asked to prefer the world of ideas, to the world of material benefits. In so far, they are at one with the modern idealists. But they go a step further. They have reduced to a system, what in the latter is only vague longing. Whatever they have propounded, they claim to have verified by experience, and ask us to do the same, before we reject it as unworthy. Considering that we are not asked to wait for the Promised Land until death, it is but just that we should give their system a trial. If we are tempted to think that this is nothing, but the hallucination produced by fevered imaginations, we shall do well to remember that, the law of Evolution, the discovery of which is justly accounted one of the greatest triumphs of modern science was twenty or thirty centuries ago, found out by these ancient sages and accorded a prominent place in their system. Such men, it is impossible to suppose, could have been mere fanatics. Their very assumptions have the merit of being extremely reasonable and every proposition is worked out to its legitimate conclusion. The aim is the emancipation of the soul, the means the eradication of passions. Whether we subscribe to their views about the Soul and its emancipation or no, an effort to accomplish the latter is sure to make the individual, better, nobler and holier.

V. G. DESHPANDE.

THE FAN IN CHINA.

THE fan, like the chopstick, the joss stick, the lantern, or the kowtow, is a distinctively national institution of the Chinese, but it is almost as difficult to trace back the date when it was introduced into the country, as it is to ascertain exactly when China first enjoyed the morning light of her peculiar yet wondrous civilisation. We have it on one authority that the Emperor Hsien-Yuan, who ascended the throne about 2700 B.C., was the monarch responsible for the introduction of the fan into China, while another authority declares that it was at the commencement of the Chow dynasty, or over a thousand years later, that the article was invented and brought into general use. Other Chinese antiquarians again positively maintain that it was the wise and beneficent Emperor Shun, of revered memory, who brought the fan into use with the object of conducing to the comfort of his children. He ascended the throne, it may be remembered, about 2255 B.C. Be all this as it may, it is clear the fan not only took immensely the fancy of a people always characterised by a certain æstheticism of taste, but continues to the present day to be absolutely indispensable, whether among the rich or the poor, the great or the small; and if one travels through the celestial Kingdom during the warm summer months, one observes a constant flutter of fans, disclosing rare, quaint, startling and often singularly beautiful artistic effects. All sorts and conditions of Chinese either fan themselves or are fanned by domestics employed for the purpose. Among those of high social degree, during the hot weather, it is the fashion to get servants to stand behind their masters at meal times and work at the large feather fan a particular variety, originally made, says a pretty legend, (and China is full of pretty legends) from the tail feathers of a pheasant under singular circumstances. It appears that an emperor

of the Yin dynasty, on a certain occasion associated the crowing of a pheasant with some fortunate event, and since then the rich plumage of these birds has been used for the making of these fans. Indeed, Chinese antiquarians have found reason to believe that the first fans ever used were turned out of the plumage of birds and the foliage of trees, and in the language of Chinese literature the fan is described as the Phoenix Tail or the Jay's wings. Figuratively, it is a pretty national conceit to speak of this appanage as a "strike the butterfly," a "chase the flies," a "call the wind," or a "change the season." Labourers in China cool themselves with fans as they go along the streets bearing loads, little urchins are especially engaged to fan busy, fat and perspiring shopkeepers and sales-men, soldiers fan themselves even when on parade, and among the quaint paraphernalia in the procession of a Mandarin of certain rank is a huge wooden fan, and a curious phase of Chinese etiquette lays down that if two Mandarins of this particular rank meet on the highway, the servants of each should run up and interpose the large wooden fans between the sedan chairs of their masters, who are thereby very conveniently supposed not to see one another and are consequently saved the trouble of dismounting and exchanging bows, as another rigorous rule of Chinese etiquette lays down. There is remarkable diversity in the shapes, sizes and qualities of Chinese fans, and every now and then, some fresh variety, displaying some pretty difference of design, comes into vogue and is made much of, especially among the rich. Every city and province claims its own characteristic fan. There is the large palm leaf variety, durable, cheap and most serviceable of all, and, as any one who has travelled in China knows, it is to be met with in every tea shop, inn, monastery and private drawing room, in which last it is placed for the use and convenience of visitors. There is the common folding fan, which it is scarcely possible to improve upon, and which one finds distributed all over China, even as far up as Thibet. It is

made either of paper or silk, with an ivory or sandalwood, but most generally, a bamboo handle. The number of ribs, or bones, as the Chinese call them, in a folding fan, is a matter on which considerable stress is laid by both maker and user. Sixteen is reckoned the standard, this number being preferred because a fan with so many bones opens into a convenient number of interspaces to admit of the inevitable poetical inscription which cannot, according to custom, exceed a certain number of lines. There is the Honkow fan, strongly made of paper that has been oiled and rendered water proof but it occupies a very low place in the estimation of the Chinese, for its colour is black, and black in China is, as we know, typical of every thing that is morally base and unclean. Notwithstanding this colour disability, the fan is very commonly used by sedan bearers, a degraded class, as well as by old men, who are supposed to be above demoralising influences. It is noteworthy that the manufacture of black fans to be sold chiefly to "foreign devils" has long been a thriving business in Canton and its environs. There is a very curious variety of fan which goes by the name of the "broken fan." At first sight it appears to be of the simple folding kind, but, if it is opened from right to left, it seems to fall to pieces, for each bone with the part attached to it is separated from all the others as though the connecting strings were broken. The Formosan fan, invented, it is said by a needy scholar, is at the present day no more than a curiosity. It is in the form of a thick leaf and it has the appearance of a cone with the top lopped off and a short handle fitted to the line at which the apex of the cone has been severed. On its surface is a landscape or figure picture artistically traced with a hot iron. The dagger fan which according to most accounts is an old Japanese invention, but is now fairly common in many parts of China, is an utter deception, for while it looks like a folding fan made in lacquer, it is in reality a sheath concealing a deadly little

dagger. The Mapfan, a far more honest and useful article, makes as its name implies, a valuable travelling companion, for it gives the plan of some city or district, besides information of distances from place to place. Another fan which is such only in name but something very different in reality is the "steel fan," being no more than a bar of metal shaped and painted to look for all the world like an ordinary and harmless fan. Celestial *budmashes* and *larrikins* are very fond of sporting this treacherous weapon which admits of being used with very murderous effect. In one sense a far more innocent, but in other ways a most diabolically ingenious article is the "secret fan," which being opened in one way reveals a flower or bird or some other chaste and exquisite design, but turned up the other side, discloses some abominably immoral sketch.

The ordinary folding fan above referred to, which is popular mainly for its handiness, is generally stuck in the high boot of the Celestial aristocrat and secured in the loose jacket of the labourer when it is not required for actual use. It is the fan that lends itself best to artistic decoration and is often made a thing of beauty. It is ornamented, for the use of the rich with pendants of amber jade, ivory, cornelian or other valuables and is frequently secured by the wearer in a beautifully embroidered case. It is accounted an appropriate gift for a husband, wife or other near relation for festive occasions. Fan etiquette is a matter of considerable interest and attention in China, and there was a time when distinction was strictly observed between fans to be used in summer and those to be carried in winter. It is still considered bad form to be seen with a fan too late or too early in the year, and although no dates have been fixed by convention to mark the beginning and end of the fair season, it is considered *infra dig* for a Chinese gentleman to sport a fan after a certain period of the year. Inscriptions upon fans vary with every variety of thought and feeling, and some of the most

exquisite little poems to be met with in Chinese literature were originally inscribed on fans. The present writer once came across a fan on which was inscribed Chinese translation of Longfellow's celebrated "Psalm of Life," and another containing the following inscription, ingeniously worked in seven lines with fifteen characters to each line:—

Those who have not known the bitterness of war cannot appreciate the happiness of peace.

Those who have not known the bitterness of desolation and famine cannot appreciate the happiness of plenty.

Those who have not known the bitterness of estrangement and death cannot appreciate the happiness of reunion with loved ones.

Those who have not known the bitterness of adversity and sorrow cannot appreciate the happiness of repose.

Those who have not known the bitterness of hunger and cold cannot appreciate the happiness of repletion and warmth.

Those who have not known the bitterness of disease and pain cannot appreciate the happiness of health and strength.

Those who have not known the bitterness of dangers by land and sea cannot appreciate the happiness of safety and quiet.

NORMAN RUTHVEN.

THE LATE MR. CECIL RHODES.

IN the foreign periodicals for last month, the absorbing topic of interest has been the death of Mr. Cecil Rhodes whose career has attracted universal notice and elicited diverse expression of opinion. Mr. Rhodes is judged by such varying standards that the most opposite verdicts are rendered. One school of writers praise his remarkable frankness and *bonhomie* of disposition; they hold that he was essentially one in the first line in the nineteenth century, who by his firm belief in the great destiny of England was led to dream of mighty things

"That to the dull did seem,

Beyond the reach of mortal grasp."

The opposite school maintain that he was the sport of fortune and the creature of circumstances and hardly think it right to accord to him the possession of that 'dramatic quality' which enables one man to feel with all the feelings of another; otherwise, he would never have hoped to subdue Dutch Africa with a troop of police led by a doctor of medicine. Whatever the judgment may be, it is not denied that he was a man of large spirit, boundless enthusiasm and boldness backed by equal energy, and that he had these in such abundance that no task was likely to daunt him and that by the exercise of them he at least changed the face of South Africa. The lady who writes under the name of "C. de Thierry" in the *Empire Review* calls Mr. Rhodes the Hannibal of the civilized world. She says that all through the centuries it has been England's good fortune to bring forth the right man at the right moment. When he came on the scene, the loyalty of South Africa which was vital to the maintenance of British Empire, needed a man and he came in the person of Cecil Rhodes. He stands alone not because of what he did, but because he did it single handed. His cardinal doctrines will be best given in the words of Mr. Sidney Low who gives some excellent recollections of Cecil Rhodes in the *Nineteenth Century*:—

First that insular England was quite insufficient to maintain or even protect itself without the assistance of the Anglo-Saxon peoples beyond the seas of Europe. Secondly that the first and greatest aim of British statesmanship should be to find new areas of settlement and new markets for the products that would in due course be penalised in the territories and dependencies of all our rivals by discriminating tariffs. Thirdly that the largest tracts of unoccupied or undeveloped lands remaining on the globe were in Africa and therefore that the most strenuous efforts should be made to keep open a great part of that continent to British commerce and colonisation. Fourthly that as the key to the African position lay in the various Anglo-Dutch States and Provinces, it was imperative to convert the whole region into a united self governing federation, exempt from meddlesome interference by the home authorities, but loyal to the Empire, and welcoming British enterprise and progress. Fifthly that the world was made for the service of man and more particularly of civilized white European men who were most capable of utilizing the crude resources.

of nature for the promotion. And finally that the British constitution was an absurd anachronism and that it should be remodelled on the lines of American Union with federal self-governing Colonies as the constituent States,

It is not, therefore, surprising that by Englishmen he should have been regarded as the imperial leader of the race, and by colonials as the personification of the imperial genius in England. The key to his ideals and his solution is laid down by Mr. Rhodes himself. He says:—

Please remember the key of my idea discussed with you is a society, copied from the Jesuits as to organisation, the practical solution, a differential rate and a copy of the United States constitution, for that is Home rule or Federation, and an organisation to work this out, working in the House of Commons for decentralisation, remembering that an Assembly that is responsible for a fifth of the world has no time to discuss the questions raised by Dr. Tanner or the important matter of Mr. O. Brien's breeches, and that the labour question is an important matter, but that deeper than the labour question is the question of the market for the products of labour, and that, as the local consumption (production) of England can only support about six million, the balance depends on the trade of the world.

That the world with America in the forefront is devising tariffs to boycott your manufactures, and that this is the supreme question, for I believe that England with fair play should manufacture for the world, and, being a free-trader, I believe until the world comes to its senses you should declare war—I mean a commercial war with those who are trying to boycott your manufactures—that is my programme. You might finish the war by union with America and universal peace—I mean after 100 years.

He believed that the great aim which statesmen have pursued through politics might be worked through by money. He really shows in the above declaration that he believed in a Jesuitical society of the rich for this purpose. It may be regarded as a ghastly proposal and if it is ever conceivable it would be a tyranny which, as it is, is sure to have vanished with Mr. Rhodes. It was however, the distinction of Mr. Rhodes to prove the possibility of there being one such man. Mr. Holland in the course of an excellent article in the *Commonwealth* remarks:—

His mistake was to over-estimate the capability of wealth as an instrument for the realisation of Ideals. But his Will is the evidence how thorough was his conviction. And no wealth hid from him the worth of human character. Still he saw the need of endowing the Federated Colonies, not with money, but with the deep associations that come from heroic graves in solitary places; and he himself had retained the soul which desired for its last rest, not the crowded, fevered mart, but the solitude of the wide outlook in the heart of the hills.

Beneath all his schemes it would appear lay a deep conviction that his work tended towards the betterment and progress of humanity. Like the apparel the speech too proclaims the man. And we may see the essence of the man, the bedrock of his nature in the following utterance of his. Speaking at Woodstock a few years ago he looked up to the great mountain above and said:—

I find that up that mountain, 'one gets thoughts—what you might term religious thoughts, because they are thoughts for the betterment of humanity, and I believe that is the best description of religion, to work for the betterment of the human beings who surround us.' ... There are those, who throughout the world have set themselves the task of elevating their fellow-beings and have abandoned personal ambition, the accumulation of wealth, perhaps the pursuit of art and many of those things that are deemed most valuable. What is left to them? They have chosen to do what? To devote their whole life to make other human beings better, braver, kindlier, more thoughtful, and more unselfish, for which they deserve the praise of all men.

Here we get a glimpse into the foundation of the great fabric of work and service which he bequeathes to future generations. After this, one would feel inclined to forget his faults.

In the gallant and remarkable career of Mr. Rhodes two acts stand out prominent. Up till the Matabele war, Mr. Rhodes had nobly striven to weld together English and Dutch in common interest. But, in dread of seeing the reform of the Transvaal Republic take a shape which would carry it out beyond the hopes of an African Federation under the British flag, he sacrificed the Cape Dutch who had trusted him as their champion against the hated Krugerism. It was held as an aberration of judgment as well as a betrayal—"a betrayal of the Dutch Cabinet of which he was Prime Minister—a betrayal of the governor from whom he accepted the responsibilities of office, a betrayal of the sovereign whose Privy Councillor he had become." It was an act which degraded the level of politics at home and inflicted a stain upon Mr Rhodes' position itself at the Cape. The other act is his Will which carries us beyond the range of war and makes for unity between nations. His superb endowment of international scholarships which "starts Oxford on a new career as

cosmopolitan university centre for the whole Anglo-Teutonic world," enables us to see how much he thought could be done by the power of gold. The question is naturally asked "How is it that the man who made the Will made the Raid." Here is a man with far-reaching and chivalrous generosity, with his ardour for the love of justice, peace and liberty and who is at the same time associated with the intrigues and treacheries of that disastrous disgrace, the Raid. We have no space here to review the curious and interesting answers that are given. But judged by one standard, namely, that there are few tasks more fruitful and beneficent than to strengthen the pillars of the British Empire, the life-work of Cecil Rhodes cannot be over-estimated. We give below passages from his last Will relating to scholarships taken from the *Review of Reviews* :—

Whereas I consider that the education of young Colonists at one of the Universities in the United Kingdom is of great advantage to them for giving breadth to their views, for their instruction in life and manners and for instilling into their minds the advantage to the Colonies as well as to the United Kingdom for the retention of the unity of the Empire. And whereas in the case of young Colonists studying at a University in the United Kingdom I attach very great importance to the University having a residential system such as in force at the University of Oxford and Cambridge for without it those students are at the most critical period of their lives left without any supervision. And whereas there are at the present time 50 or more students from South Africa studying at the University of Edinburgh many of whom are attracted there by its excellent medical school and I should like to establish some of the Scholarships hereinafter mentioned in that University but owing to its not having such a residential system as aforesaid I feel obliged to refrain from doing so. And whereas my own University, the University of Oxford has such a system and I suggest that it should try and extend its scope so as if possible to make its medical school at least as good as that at the University of Edinburgh And whereas I also desire to encourage and foster an appreciation of the advantages which I implicitly believe will result from the union of the English speaking peoples throughout the world and to encourage in the students from the United States of North America who will benefit from the American Scholarships to be established for the reason above given at the University of Oxford under this my Will an attachment to the country from which they have sprung but without, I hope, withdrawing them or their sympathies from the land of their adoption or birth. Now therefore I direct my Trustees as soon as may be after my death and either simultaneously or gradually as they shall find convenient and if gradually then in such order as they shall think fit to establish for male students the Scholarships hereinafter directed to be established each of which shall be of the yearly value of

£300 and be tenable at any College in the University of Oxford for three consecutive academical years.

I direct my Trustees to establish certain Scholarships and these Scholarships I sometimes hereinafter refer to as "the Colonial Scholarships,"

My desire being that the students who shall be elected to the Scholarships shall not be merely bookworms, I direct that in the election of a student to a Scholarship regard shall be had to (i) his literary and scholastic attainments (ii) his fondness of and success in manly outdoor sports such as cricket, football and the like (iii) his qualities of manhood, truth, courage, devotion, to duty, sympathy for the protection of the weak kindness, unselfishness and fellowship and (iv) his exhibition during school days of moral force of character and of instincts to lead and to take an interest in his schoolmates, for those latter attributes will be likely in after-life to guide him to esteem the performance of public duties as his highest aim.

No student shall be qualified or disqualified for election to a Scholarship on account of his race or religious opinions.

The *Review of Reviews* for May has an article full of revelations about Mr. Rhodes. The article shows how they dreamed a dream in common; how the famous capitalist consented to the absorption of the British Empire in the American Union; how the Empire was to be 'under-pinned' by an organisation analogous to the society of Jesus; how Mr. Stead was to have disposed of Mr. Rhodes' fortune, how a dark shadow came over the 'fair and smiling prospects,' and how finally Mr. Stead was reproached for insubordination and disobedience though nothing disturbed their mutual love. Mr. Stead expresses his love for Mr. Rhodes in no uncertain terms. Nor has Mr. Rhodes compelled the admiration of Englishmen alone. To quote the views of a French writer, Mr. Rhodes represented in the political history of the world "something new and strange." Up to the present time the world has seen men of the aristocracy gifted with talents, as well as privileges of birth, do great things. They have also seen the lower classes produce geniuses and men who by force of character have become great. But "Mr. Rhodes was the first statesman-millionaire who owed his wonderful power to vast wealth." He leaves behind him a terrible void, for men of his order are not found in every generation. *Requiescat in pace.*

The World of Books.

OUTLINES OF METAPHYSICS by John S. Mackenzie. Macmillan & Co., London.

We congratulate Prof. Mackenzie on the excellent volume he has brought out. It is an admirable introduction to the study of Metaphysics and would be found chiefly serviceable to the student who is just beginning seriously to face the great issues that are included under the term Metaphysics. Though it does not give a comprehensive and connected survey of philosophical first principles as they appear in the light of the most recent developments of thought, it indicates with remarkable lucidity and suggestiveness the place and nature of the various metaphysical problems and the methods by which they may be dealt with. Prof. Mackenzie looks at Metaphysics from a neo-Hegelian standpoint and defines it as the science that seeks to deal with experience as a whole, or rather as a systematic unity. Special sciences deal with some part or aspect of experience but the most important task for Metaphysics is that of sifting the ultimate conceptions that lie at the root of our conscious experience but left over by the special sciences. While special sciences are limited in their scope and evade the ultimate problems which their subject-matter suggests, Metaphysics aims at completeness of view and seeks to press all its questions home.

The method adopted by Prof. Mackenzie in seeking to understand the content and implications of our conscious experience is the genetic method. "What we seek to study is the general nature of our experience of the world. Now this, at least, is clearly a growth, and we can hardly hope to understand it except by observing its forms of development." How does the experience of a world grow up, and what is the significance of the various elements in its development? This, according to Prof. Mackenzie, is the problem of Metaphysics and his book is an attempt to answer it in the light of the most advanced speculative thought of the world. He distinguishes three main levels of conscious experience, namely, sense-experience, perceptual experience, and conceptual experience and at each of these levels he notes the operation in different forms of those fundamental aspects of our experience which are emphasised by Psychologists—its apprehensive aspect, its feeling aspect and its conative or active aspect. The nature and metaphysical significance of the aspects of conscious life and the stages of conscious development are discussed with some elaboration and the activity of thought

in the building up of experience is brought out in a masterly way. The great metaphysical truth that the whole system of reality—and not merely the world as we know it—is constituted by thought-determinations is presented in such a clear and intelligible light that even a beginner may grasp its meaning and implications. What are the fundamental forms of construction that are involved in the building up of our experience? How far is each of these forms coherent in itself and capable of being systematically worked out? These pregnant questions have been discussed in the latter part of the book, though their treatment is neither thorough nor complete.

The impulse of thought to view the whole content of experience as a systematic unity is shown to result in the following main modes of ideal construction:—(1) Perceptual construction, or that which is involved in the simple setting before us of a number of objects; (2) Scientific construction, or that which is involved in the attempt to connect objects together, so as to think of them in relation to one another as parts of a larger system; (3) Ethical construction, or that which is involved in the effort to bring objects into relation to a final end or good; (4) Aesthetic construction, or that which is involved in the apprehension of objects in relation to feeling, as the beautiful or the reverse; (5) Religious construction or that which is involved in the effort to view the universe as a complete system which is one, beautiful, and good; (6) Speculative construction, or that which is involved in the systematic attempt to think out the justification for such a view of the universe. Each of these ideal constructions is subject to inherent difficulties and limitations and neither of them gives complete satisfaction to the constructive impulses of thought. Yet they are necessary for the coherence of our experience and give it a rational significance. This is the point which Prof. Mackenzie urges in the concluding chapter of the book, in which he summarises the broad results of his metaphysical enquiry. The volume, though elementary, is full of suggestive and systematic thought and will, we have no doubt, commend itself to a large circle of students of Metaphysics.

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STEPHEN CRANE'S "LAST WORDS."

Amongst the latest additions to Bell's Indian and Colonial Library is a volume by Stephen Crane, entitled *Last Words*. The book is a collection of short stories and impressionist sketches, and contains no episode equal in length or importance to that of the famous *Red Badge of Courage*. The index of the book is subdivided as follows. *The Reluctant Voyagers, Spitzbergen Tales, Wyoming Valley Tales, London Impressions, New York Sketches. The Assassins in Modern Battles. Irish Notes, Sullivan Country Sketches, and Several Miscellaneous stories.*

Of these, the *Spitzbergen Tales* will probably be most appreciated by those who admired Crane's earlier psychological and battle studies. They are wonderfully convincing in style, almost too much so, especially one entitled *The Upturned Face*, in which the burying by two comrades of a man killed in battle is described with gruesomely vivid force. Stirring to a degree is another tale of this series, namely, *And if He Wills We must Die* in which it is shown how sixteen men held a house against a force enormously superior in numbers, who finally shot them all down. When the leader of the opposing force at last got into the house, "he turned with a shrug to his sergeant. "God I should have estimated them at least one hundred strong," said he, so gallant had been the little band's resistance.

In *The Wyoming Valley Tales* we are shown something of what was endured by the brave pioneers in some of the wilder parts of America. The Red Indians against whom they had to contend were pitiless foes, who inflicted horrors unspeakable upon their victims before granting them the crowning mercy of death.

It seems almost a pity that some sketches which were evidently only slight newspaper contributions should have been given a place in this last volume of Crane's work. They are of course clever enough in their own way, as all that Crane wrote was, but it is very doubtful whether such details as *London Impressions* will add to the writer's reputation.

The *New York Sketches* are for the most part powerful, especially the one which deals with *Minetta Lane, New York*. Crane certainly knew what the life of the slums was, and, what is more, he was able to show others what he saw. Want and vice too often go hand in hand, but even amongst the wretched inhabitants of these terrible slums Crane shows that gleams of human kindness occasionally lightened the almost overwhelming darkness.

Like most people with a keen feeling for what is tragic, Crane had a vivid sense of humour and in this last book of his examples of the humorous are not lacking, from the broad comedy of *At Clancy's Wake* shading to the subtler fun of *The Reluctant Voyagers* and *Self-Made Man*.

It is almost impossible for those who are unfamiliar with the versatility of Crane's genius to believe that the same person wrote the light-hearted sketches just referred to and the weird and horribly powerful studies entitled *The Snake* and *The Squire's Madness* and a *Tale of Mere Chance*. In none of these stories is the subject matter new, but the treating of them is, for Crane's genius consisted largely in being able to treat common subjects in an uncommon way. He saw naught common or unclean, but transformed by his genius what others less gifted might pass by contemptuously, into studies that it is a delight to examine, not only for their inherent and obvious truthfulness, but for the brilliancy and insight into human characters and motives which distinguishes them.

Those who are attracted by fantastic studies will delight in *The Victory of the Moon. The Voice of the Mountain, and the Donkey that Lifted Hills*. Space forbids a more detailed criticism of the book here, but at best it is hoped that enough has been said here to show that Stephen Crane's *Last Words* contains a quantity of reading suited to satisfy the most varied tastes.

English Readers for Indian Schools.

We have received from Messrs. Macmillan & Co. the following publications; (1) *Easy Selections from Modern English Literature*, in two parts, by Sir Roper Lethbridge. (2) *Selections from English Literature, Part I* by Mr. Cecil M. Barrow, M.A., the well known Principal of the Victoria College, Palghat. (3) *English Poetry for schools* by Mr. George Cookson, B.A., Assistant Master in the Khedivish School at Cairo. The last publication is a special edition, annotated by Mr. A. V. Houghton, B.A., to meet the requirements of Indian students. Its chief merit consists in the inclusion of several copyright pieces by well-known modern poets like Swinburne, Kipling, Rennel Rodd, Robert Bridges, Tennyson, Browning and others. Another useful feature of this book is the short critical and biographical notes on the British poets and a summary of the four chief periods of English Poetry embodied as appendices.

THE MISSIONARY by George Griffith (George Bell and Sons, London.)

The dictum that "the sins of the fathers shall be visited on the children" is the burden of this very interesting novel of London life. The plot is an intricate one and is unravelled with much skill and probability. Life, in its most ordinary aspects, is full of little ironies and deep tragedy, and Mr. Griffith in this story has exemplified this with remarkable facility. Vane Maxwell, an Oxford Student, and son of a distinguished Indian officer, meets with a girl, Carol Vane, who is no better than she should be, and belongs to the large class of "superfluous" women leading immoral lives under cover of respectability. Maxwell discovers that this young woman has an appearance curiously like his own. Of course he attempts to make love to her but is unexpectedly resisted. Subsequently he learns that she is the half sister of the unfortunate girl by the same mother, who is a confirmed inebriate and who he believed had died in her infancy. His chance acquaintance with Carol Vane reveals to him that there is no getting out of the coils of heredity, and that he has an irresistible craving for drink, to which he, on two occasions, utterly succumbs. This consciousness leads him to break off his engagement with Miss Enid Raleigh to whom he had been engaged for years, and for whose kisses he had fought a homeric battle, as a boy, with Reginald Gathorne his life long rival. Vane Maxwell abandons his prospects in the Indian Civil Service and takes orders, and, as a priest, electrifies London by his unconventional and outspoken sermons in fashionable churches and secularist halls. His Mission--for he is the missionary—is not to the heathen, but to the self satisfied Pharisees and smug ecclesiastics of the great metropolis. How he succeeds, how his acquaintance with Coral Vane leads to sensational disclosures, one murder, the establishments of a house for fallen women, and finally a happy ending must be discovered by the reader. Besides the story itself, there is much common sense and broad Christian charity to be gleaned from Maxwell's sermons and discussions, reported in the novel which is distinctly above the average of common-place fiction. One concluding remark about the only Indian character in the book must be permitted us. Koda Bux is a Pathan, that is a moslem, yet he uses the *roonial* of the Thug to slay his master's enemy, and he talks of Gods, and Causes and future lives as if he believed in metempsychosis! The author is somewhat mixed in his ideas regarding Mahomedans and Hindus and their beliefs.

Shakespeare's Macbeth and the Ruin of Souls by the Hon. the Rev. Dr. Miller, C. I. E.
Published by G. A. Nutesan & Co., Esplanade, Madras. Cloth bound, Price One Rupee. Wrapper 8 as.

This is a study of Shakespeare's great play by our veteran educationist, the Rev. Dr. Miller and is an excellent companion volume to the author's "King Lear and Indian Politics," published last year. After disposing of some preliminary points, Dr. Miller takes up the leading characters of the play for careful delineation. We are of opinion that he has succeeded in skilfully depicting the mixture of both the good and bad elements in the character of Macbeth and the growth of the latter under the actual circumstances in which he has placed till at last his moral ruin was accomplished and he proceeded to perpetrate the dark deeds which will ever be associated with his name. The contrast between the "potential nobility" of Macbeth's character and the disaster actually wrought in it by the yielding of his will to temptation,—though not without passing through a struggle in the course of which many circumstances occurred, and many helpful opportunities offered themselves to enable him to make a manly retreat, if he chose, is forcibly and eloquently brought out; and the result of Dr. Miller's inquiry is a psychological study which is valuable not only to the student of Shakespeare's great play, but also to the general reader and to the man of the world who has to keep his course straight on amidst the difficulties and delusions which beset all, and especially highly-placed men.

Dr. Miller's contrast between Macbeth and Lady Macbeth is highly interesting, and we entirely agree in his estimate of the latter as "a weak woman dowered with fictitious and short-lived strength by an impulse which bears her, with little consciousness and no reflection, beyond the bounds of nature." In her strength and in her weakness, Lady Macbeth is a woman, and Dr. Miller has certainly succeeded in rehabilitating her womanly character against the critics who have misunderstood her and made of her a monster having none of the qualities of her sex and displaying in the evil cause which she had made her own the predominantly masculine characteristics of persistent resolution and unbending and unscrupulous self-forgetfulness in the adaptation of means to ends. Dr. Miller's success in dealing with the other important characters of the play is, we think, equally conspicuous.

CIVIL ENGINEERING AS APPLIED IN CONSTRUCTION by *Levison Francis Vernon Harcourt, M. A. M. Inst. C. E. (Longman's Green & Co.)*

The best definition of civil engineering that has ever been evolved is that formulated by Thos Tredgold, for the original charter of the Institution of Civil Engineers, who stated it to be "the art of directing the great sources of power in nature for the use and convenience of man." This practically divides all engineers into two classes civilian and military, but the vast range of matters dealt with by civil engineers has led to numerous subdivisions of which the three principal are civil, mechanical and electrical. Each of these again has been further subdivided but it is only with what is still left to the civil engineer in the modern acceptation of the term that we have now to deal with. In practice the duties of the officers of the Indian Public Works Department are those of the modern civil engineer and these are so numerous and varied that specialization has become a necessity and men spend their lives in one or other of the great branches of the department whilst not a few devote themselves to well defined sections of a special branch. Yet the same preliminary training is necessary for them all and upon a sound knowledge of mathematics, chemistry, physics and geology all must base their professional career. The average student of an engineering college has seldom any well defined idea of the work which lies before him in the future and his selection of any particular branch of engineering is determined to a large extent by what offers when he first ventures into practical work. A concise summary of the achievements of the civil engineer is therefore a desirable book to place in the hands of young engineers as it will serve to direct their attention to the wide ramifications of their profession and help them to understand how the same general scientific principles may be applied in different ways to the design and construction of works of the most varied nature.

In *Civil Engineering as Applied in Construction* Professor L.F. Vernon Harcourt of University College, London has essayed this extremely difficult task and has succeeded in compressing within the limits of a single volume, a large one it may be mentioned, an enormous amount of information on modern civil engineering. In England, engineering professors are almost invariably allowed to take private work and the bulk of them are men in the front rank of their profession. Professor Vernon Harcourt has made a special study of the hydraulics of marine and river engineering and not long ago was con-

sulted about the deterioration of the Hooghly. Both as a teacher and as a consulting engineer he has had a long and varied experience and in the work before us he has summarized the results of his extensive and careful studies in a lucid and succinct manner. Covering so many subjects and dealing with engineering work, all over the world it is impossible within the limits of our space to review the work in detail and we must confine ourselves to briefly indicating the nature of its contents and to a few remarks upon matters specially connected with India.

The work is divided into 5 parts and consists of 35 chapters each dealing with some special branch of civil engineering. After an introductory chapter Part I. treats of materials, preliminary works, foundations and roads, Part II of railway bridges and tunnel engineering, Part III of river and canal engineering with a short chapter on irrigation works, Part IV of dock works and maritime engineering and Part V of sanitary engineering. The book concludes with a valuable index, which renders it possible to dig out information regarding any special point with a minimum of trouble.

Apart from buildings and roads the great bulk of the Civil Engineers in India are employed on railways and irrigation works. Harbours and docks and sanitray engineering employ a few but these branches of the profession do not bulk largely in this country. Probably nowhere in the world has money invested in engineering works yielded a greater return or conferred greater benefits upon the people than in India. Five and twenty thousand miles of railway have opened out the whole country and whilst yielding an average return of over 5 per cent. on the capital invested have done incalculable service in developing the agricultural resources and preventing the frequent occurrence of local food famines of severe intensity. Twenty million of acres or fully 30,000 sq. miles of land yield unfailing harvests owing to the plentiful water supply derived from the canals of the irrigation engineers. Naturally in dealing with these subjects Professor Vernon Harcourt makes frequent references to Indian Works and always in terms indicative of a high appreciation of the administrative and technical skill which has been brought to bear upon the solution of the special problems which have had to be dealt with in this country.

Selected examples of modern engineering work are discussed and a careful study of the book will we feel sure repay the labour it will entail and will greatly help senior engineering students in this country in arriving at a more definite conception of the fields of human enterprise in which the civil engineer labours.

THE CONQUEST OF DEATH. by Helen Welman Ernest Bell, London.

This volume embodies a speculation and sets forth the possibility of an eternal and immortal life in the flesh. It is the outcome of a new metaphysical movement which has of late years sprung up in America, based on the assumption that the source and real substance of every thing is Universal spirit, of which all material things are outward expression, that the growth of man is limitless, that he has an inherent power to conquer every environment, and to prove himself not only the master but also the creator of all things and conditions. This doctrine of the universality of mind and of its immediate power and ultimate domination over matter has furnished a new philosophy of life, but its practical value is shown to lie in its application to the healing of disease. The votaries of this new thought believe that disease of the body is entirely of mental origin. It is the disease, lack of ease, or mistaken conception of the law showing forth in the body. It is the fruit of mistaken reasoning made apparent to the senses. As the physical body is the expression of the mind, the ignorance, wrong thought and false beliefs which produce inharmony in the mind naturally result in bodily disease. The best way to attack disease and bring harmony and health to the suffering person is therefore to correct his mistakes and change his beliefs. The belief lying at the root of all disease, death and old age is the belief in the deadness of matter and the impotence of the soul to make and master its own destiny. Non-recognition of life, life that is self-existent and eternal, as the basis of all things, and non-realisation of the majesty of the undying ego are at the root of all ills that flesh is heir to. A man is as he believes and belief is the shaping power in the body. If he believes that he is weak, helpless, and mortal, he becomes weak, helpless and mortal. If he believes otherwise, he grows endlessly in the direction of immortality, freedom and happiness.

There is some hidden impulse within man that denies the inevitableness of death. It always seems a far-off and shadowy possibility but not an inevitable reality or an irresistible fate. Every hope being the sure prophecy of its own fulfilment, the intuitive perception of immortality which is implanted in all men is an unflinching indication that the human body possesses a power to conquer all its disabilities and save itself here, in the present world.

Reference has been made above to the mental method of healing. If there exists a law by which

through purely mental processes diseases of the body can be removed, it follows that, with a fuller understanding of the law by which this is done, we shall be able to annihilate disease and continue life in the body indefinitely.

These are some of the arguments by which the author of the volume before us tries to establish her novel thesis. The premises embody a certain amount of truth as modern psychology would show, but the conclusion drawn from them is certainly farfetched. We undoubtedly recognise the immense power which mind exercises over the body, but we cannot accept without evidence more cogent and irrefragable than we are able to find in these pages its capacity to counteract the law of decay and disintegration which seems to reign supreme over this mortal sphere of existence.

Books Received.

MACMILLAN & CO.

Principles of Western Civilization, by Benjamin Kidd.
W. BLACKWOOD & SONS.

Thomas Huxley, by E. Clodd.

LONGMANS GREEN & CO.

History of India, by Sri Hemlota Devi (Mrs. Sarkere),
Translated by M. S. Knight.

A. J. COMBRIDGE & CO.

Vicissitudes of Fort St. George by David
Leighton Rs. 2-8

GEO. BELL & SONS.

The Pagan's Cup, by Fergus Hume.
The Mystery of a Shipyard, by R. H. Savage.

D. C. HEATH & CO.

Heath's Practical French Grammar 3/6

METHUEN & CO.

Junior French Examination Papers, by F. Jacob, M.A.
Junior Latin Examination Papers, by C. G.
Botting, B.A. 1/
Commercial Geography of Foreign Nations, by
T. C. Boon, B.A. 2/
A Junior English Grammar, by W. Williamson, B.A. 2/

THE UNIVERSITY TUTORIAL PRESS.

Livy Book XXI Text and notes by B. J. Hayes, M.A.,
and A. H. Allcroft, M.A. 2/6

T. FISHER UNWIN.

The Searchers, by Margaretta Byrde.

E. & S. LIVINGSTONE.

Medical Jurisprudence, Toxicology and Public Health,
by Prof. Claister.

Elementary Text Books of Zoology, by Masterman
(2nd Edition) : : : : 12/net

Topics from Periodicals.

DELHI AND THE PALACE OF THE EMPERORS.

The *Metaphysical Magazine* for May contains a very interesting article on this subject from the pen of Marie B. Smith. Want of space forbids our reproducing the article in full, and we therefore give a few excerpts therefrom which, in view of the forthcoming coronation there, will be read with interest. The city was regarded as the general capital of the great Mogul Emperors and still represents the splendour of their reigns. Says Mrs. Smith:—

The innumerable palaces, once the homes of luxury, romance and courage, as well as of cruelty; the far-famed Jumna Masjidmosque, which held twelve thousand people, the fount and beautiful gardens, all attest to a life busy here, listless there, impenetrable to mental sight everywhere, such as is not seen anywhere in Europe.

The wondrous arts of the Mahomedan builders is attested by the gorgeous

MOSQUE

built by Shah Jahan in 1658, with its red sandstone walls, relieved by marble cupolas and graceful minarets, prepares one for the chaste and quiet view within. The marble floor with its jet borders, the marble pulpit and white marble fountain outside, remind the visitor of a faith in which cleanliness is a part of godliness; and the myriad worshippers so constant in hourly devotion, contrast strangely with the rare use of our Christian churches which seem deaf and dumb to the passing life about them.

The most costly and imposing structure in Delhi is the

PALACE OF THE EMPERORS

where the emperor sat on a marble throne, with a marble canopy back of this is a wall ornamented with finest mosaic work—birds in semi-circles in natural colors, all their attitudes and habits represented, all composed of precious stones, and besides these are mosaics of fruits, flowers and beasts known, in India, and similar in production to the walls of the Seraglio. In the private hall the roof is supported by six rows of (pillars; at the top of each a group of arches meet.) Both ceiling and columns are ornamented in the richest designs known to Oriental art.

The original ceiling of solid silver, it is said was carried away by the Marhattas in 1760. Beneath this matchless canopy stood the wondrous

PEA-COCK THRONE

of solid gold, wrought in gems of numerous kinds—the figures of two pea-cocks standing behind it studded with precious stones of appropriate colors to represent life. Between these birds stood the figure of a parrot of natural size carved out of a single emerald. The eyes of the parrot were two immense diamonds named the Kohinur, "Mountain of Light," and the Kohitur, "Mount of Sinai." When Nadir Shah sacked

Delhi, he did not find the Kohinur; but a woman betrayed the Emperor and informed his conqueror that the gem was hid in the turban of the Emperor; and at a great ceremony given by the conqueror Nadir proposed to the dethroned monarch to exchange turbans with him, as a token of "good faith." As there was no time for reflection and the Emperor could not decline the proposition of *good faith*, the exchange was made. After remaining a long time in the Punjab treasury, when England annexed the Punjab in 1849, this diamond was presented to Queen Victoria, and is soon to be reset in the crown of Queen Alexandra for her use in the coming coronation. Choice colored inscriptions in the decorative Persian lettering also decorate this hall of the palace.

"Lovely angels seeking pearls, row after row,
Come down to bless mankind, and fountains where
flow
Life's waters, which a crystal radiance glow."

Among the interesting and splendid objects near this wonderful city of Delhi is the Kutab Minar which signifies the

POLAR-STAR OF RELIGION

built by Kutb-ud-din, a slave in early life and a ruler who founded the dynasty known as the "slave dynasty." He died in 1210 and his name is preserved by the magnificent "Kutab," which is tower, minaret and pillar all in one. This lofty and tapering shaft of red sandstone, grey granite and banded with white marble, is five stories in height and raises its two hundred and forty feet in majestic gracefulness. In 1803 an earthquake deprived it of a symmetrical cupola, but it is still the loftiest piece of Afghan architecture now extant. The noble shaft is incrustated with chapters from the Koran, although it plainly shows its exquisite pure Hindoo designs, and still towers over the ruins of old Delhi.

"The view of the city from this great height is indescribable"

Mrs. Smith devotes a good portion of her article to a description of the beautiful and massive palace gates for which the city is renowned and a summary of the political vicissitudes the city underwent. She concludes:—

Delhi gallantly defended herself, as all the world knows, in the terrible mutiny of 1857; and all through the long and dreadful siege, even the English officers realized there was a supreme power in India to which the weak looked for protection against the ambition and rapacity of the strong; for again and again, the combined efforts of the flower of the English army were overturned by some marvellous unseen power, and only when starvation was upon them did the heroic defenders succumb to greater force, and her gates were battered down. Still the beautiful architecture and interesting surroundings of the city to-day attract and compel the admiration of travellers from all lands, and Delhi still lives, beautified by her present rulers in many ways, and she has taught them to respect, even admire, the faith and divine compassion still practiced by the Hindoos.

RELIGION AND MORALITY IN EDUCATION.

Miss Geraldine Hodgson—whose name is not unfamiliar to readers of the *Indian Review*—writing to the *London Journal of Education* for May on the question of religious and moral education in schools dwells on the danger of offering to children *secular* instruction only. She remarks:—“The practical teacher knows that the “marches” between sacred and profane are an undefined region passing the wit of man to bound or limit. Moreover, were a child brought up, so far as that is possible, on purely secular lines, were he taught to reverence nothing greater than himself, and that *modicum* of demonstrable reality which his powers of intellect and feeling enable him to grasp, the result for the average person (and education, like legislation, must lay its plans for the average person) is disastrous: he grows up stunted, or, rebelling against his teacher tends to develop—perhaps develops—into a fanatic.”

Discussing the relation of morality to religion, she realizes the impossibility of a divorce between the two in any scheme of education, and in support of her views quotes the following passage from Mill.

“The idea that Socrates or Howard or Washington or Antonius or Christ would have sympathised with us, or that we are attempting to do our part in the spirit in which they did theirs, has operated on the very best minds as a strong incentive to act up to their highest feelings and convictions. To call these sentiments by the name morality exclusively of any other title is claiming far too little for them. They are a real religion.”

Those first tentative religions of which Mill speaks grow, and in their growth they take on a vesture of authority, tradition, and ritual from which no church, no sect—not even the newest—can escape quite. Says Miss. Hodgson

“Were it only a question of primitive stirrings of feeling, the problem of educating children might be an easier one; but how vast and varied are the consequences of the initial idea! In truth it is no very easy matter to deal with the religious question.” The difficulty lies in making the child apprehend the doctrines of particular sects. “The mind of an average child does not fasten on to doctrine or to a philosophical disquisition upon conduct; it can understand action, it can draw meaning from a dramatic or pathetic story or from one which is both at the same time. A genuine teacher can win a res-

ponse from ordinary children if he takes as his material any heroic figure, any striking deed, any clear instance of a definite virtue, any picturesque apologue.”

Apart from doctrine, and apart from fact, there is one other side of a child's mind that can be influenced—his emotional condition.

The writer attaches great value to “rituals” or as she would call the furniture, the appurtenances of morals and religion in imparting religious and moral instruction to children.

“These things, so different from doctrine or from matters of fact, are external, concrete, to a child most *real*: they appeal to almost every sense at once, and they kindle or petrify imagination—that keen, influential power, which, though life be long and troublesome, or long and joyous, never quite loses the impulse of childhood's impressionable hours. These matters, generally summed up in the convenient and loose term “ritual” are often dismissed as unimportant and trivial. Yet they mould the taste and inclination of growing children mould them for good or for evil; working always along the line of least resistance, along the inherited tracks and tendencies of individual temperaments.”

It is in rituals that religions differ mostly; it is here not one will compromise or yield for; it is here they win or lose the day.

“It is futile to dream of compromise and tinker with conscience clauses. Therefore, the most practical, if the least attractive way (to many) out of the difficulty is the concurrent endowment of the sects, the plan of putting various creeds on what may be called a legal and financial equality.”

No doubt in a sense, this is putting the clock back, but then says the writer:—

“Possibly we have learnt wisdom from the quarrels of recent years—perhaps strong opponents have learned mutual respect. The fact is—and the growth of the scientific spirit has trained us to look for and build upon ascertained fact—truth appears in different times and places and to varying people under different aspects; and again, the fact is that human beings, cast in so many different moulds, require diverse kinds of treatment. Consequently, on the old principle that the longest way round is the shortest way home, the apparent putting back of the clock might hasten the striking of the final hour, when, the cloud, whatever it be, which veils the truth being drawn back, we shall all alike see truth as it is and not perhaps quite as it has appeared hitherto.”

AN AUSTRALIAN TECHNICAL COLLEGE

An Australian correspondent of the *Invention* gives an interesting account of the efforts made in New South Wales for the promotion of Technical Education. He says:—

In no part of Australasia are the advantages of technical education more warmly appreciated than in the parent State of New South Wales, where, after successful experiments in the formation of classes by one of the State subsidised educational institutions in Sydney, a Technical Education Board was established, which did good work until 1889, when the State Government assumed control of the movement, the work of technical education being handed over to the State Department of Public Instruction. At this time there were 72 metropolitan classes, with an attendance of 2,077 students. In the same year the State purchased a block of land in one of the outlying portions of the city, for about £30,000, on which to erect a technical college on an extensive scale, the completed building now forming one of the leading architectural features of Sydney.

There is a chemical laboratory, and at the rear of the main structure are electrical engineering, plumbing, sanitary engineering, blacksmiths' shops, and well-equipped general engineering shops. The working of the classes is under the superintendence of a gentleman who possesses a high reputation for organising and administrative ability, and has shown a special aptitude for the work entrusted to him.

The number of enrolments in 1901, was 12,557, against 11,139 in 1900, and there are hundreds of applicants waiting for admission into the classes as vacancies occur.

The actual number of students during the third term of 1901 was:—Agriculture, 120; sheep and wool training, 79; chemistry and geology, 283; pharmacy, 24; mechanical engineering, 821; electrical engineering, 209; applied physics, 280; mathematics, 79; sanitation, 403; architecture, 371; art, 732; industrial and decorative art, 110; domestic economy, 130; separate classes, 454; total, 4,095.

The number of students attending the colleges and branch schools was 9,267, as against 8,625, for the previous year, being an increase of 642. The weekly average attendance of individual students was 7,721. Four thousand two hundred and twenty-five candidates presented themselves for examination, of whom 3,126 passed.

After giving an account of the results at the technological examinations, the writer gives the figures for the total expenditure on Technical Education during 1901. The total expenditure on technical education during 1901 for the Sydney and branch colleges and branches was £23,076. 8s. 11d.; for technological museums, £4,597. 15s. 2d.; and

for payment to teachers as part remuneration and purchase of chemicals and contingencies, £5,742. 12s. 7d.

The general features of education in the various classes at the Sydney College are as follow:—Agriculture (elementary and advanced agriculture, with day instruction in fruit and flower gardening, poultry and bee farming, analysis of milk, butter, soils, &c.; botany and farriery are also taught). Wool sorting. Chemistry and geology (practical chemistry, theoretical chemistry, organic chemistry, and assaying; day classes in practical chemistry and assaying are given, also in geology, mineralogy, mining, and metallurgy; Saturday afternoon excursions are arranged for field work in practical geology, &c., and for the inspection of mining machinery and appliances). Pharmacy, mechanical engineering (mechanical drawing, applied mechanics, blacksmithing; pattern making, boiler making, fitting and turning, iron-founding, and use of the slide rule). Electrical engineering applied physics (elementary electricity and magnetism, elementary experimental mechanics, and the physics of sound, light and heat). Mathematics: sanitation (lighting, heating, cooling, ventilation, water services, drainage, domestic sanitation, public water supply and sewage, municipal sanitation, and a special course for sanitary inspectors; plumbing comes within this branch). Architecture (architectural drawing and design, and trades drawing, architectural history, principles and appliances, building construction, quantity surveying, carpentry and cabinet making, also drawing and theory, handrailing and staircasing, manual training, wood and chip carving, and wood turning). Art (plane and solid geometry, perspective model and object, freehand from the cast, plant drawing in outline and colour, black and white, antique and life). In painting the branches are flowers, china, landscape, animal, and still life. In modelling the work is embraced under the headings life, antique ornaments, and casting. Industrial and decorative art (house painting, graining and marbling, sign writing, decoration, design, and illumination). Domestic economy, Lithography, photo-lithography, physiology, elocution, shorthand. Penmanship and correspondence, Book-keeping. Art needlework. Scientific dress-cutting and dress-making, &c.

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LORD ROSEBERY.

Mr. Arthur H. W. Colquhoun contributes to the *Canadian Magazine* for May an article headed "Lord Rosebery again in politics." Mr. Colquhoun feels that the New York cable correspondents have been giving a distorted version of the real position of Lord Rosebery and his position in British politics. The writer thinks that the time is not far off when the present conservative government will go out of office. The old Tories who have been hurried along by Mr. Chamberlain's zeal will soon lose their patience and the liberal party has hopes in the near future.

Of all Lord Rosebery's recent declarations, remarks Mr. Colquhoun, the one with the most direct bearing on future politics was his reference to Imperialism. Perhaps his exact words ought to be quoted:

"The last piece of advice I shall venture to offer the Liberal party is this—that they shall not dissociate themselves, even indirectly or unconsciously, or by any careless words from a new sentiment of Empire which occupies the nation. To many the word 'Empire' is suspect as indicating aggression, and greed, and violence, and the characteristics of other Empires that the world has known. But the sentiment that is represented now by Empire in these islands has nothing of that in it. It is a passion of affection and family feeling, of pride and of hopefulness, and the statesman, however great he may be, who dissociates himself from that feeling must, not be surprised if the nation dissociates itself from him."

Commenting on this speech of Lord Rosebery, the writer observes:—If this advice be taken, the swing of the pendulum must in due course restore the Liberals to power; but if other counsels take possession of the party, and it allows itself to be divorced from the growing sentiment in favour of the unity of Englishmen at home with Englishmen in the Imperial domains beyond the seas—a long ascendancy of the Conservative party may safely be predicted.

Mr. Colquhoun thinks however that the approaching peace, (since concluded) and a budget imposing duties on wheat and flour, clearly point to a new political situation. Lord Rosebery is in the best position to take advantage of both these factors. His attitude on the war has been in accordance with popular sentiment. As to free trade, he has consistently adhered to the Cobden policy. A year or two ago, during his retirement from party strife, he visited Manchester and there upheld free trade and all its works in a stirring speech, one of the most pronounced reiterations of the doctrine of Peel, Bright and Cobden given in the present generation. More recently still, Lord Rosebery and Mr. Asquith, his chief lieutenant, have declined to endorse a preferential trade policy involving a revival of

protection. Practically a new issue has suddenly appeared. The war once out of the way, an appeal to the traditional and accepted views of English men on trade matters may meet with a response from powerful elements now quiescent. Lord Rosebery is apparently the man best fitted to make that appeal.

THE ANGLO-JAPANESE TREATY.

Dr. Edwin Marey writes in the May number of the *Arena* on the probable effect, of the treaty recently effected between Great Britain and Japan, upon European channels of diplomacy and the agencies of American commerce. This treaty, the author clearly points out, is chiefly significant because it portends a new factor in international statesmanship—the "balance of power" in the Orient. Enlarging upon the motives that led to the formation of this treaty the writer observes that on the part of England an alliance with Japan—despairing of any alliance with the United States—seemed the most available means to protect her (England's) industrial and commercial interests. On the part of Japan the motive is sufficiently clear—she is desirous of protecting herself against a coalition similar to the one that robbed her of the fruits of her Victory over China. How much the alliance will add to England's prestige in the Far East and whether the position of England and Japan will be strengthened or weakened by it are questions that time alone can answer. He adds:—

The treaty is evidently aimed at Russia, and its purpose is clearly to check her advance in the East. How far it will be successful in this depends more upon the understanding back of the treaty than upon the treaty itself. The Russians will not fail to test the strength of the treaty, and if it appears that any considerable portion thereof is "bluff" the position of England and Japan will have been weakened rather than strengthened by it. If on the other hand the two powers have determined to act in concert much may be accomplished by their combined efforts. Provided both of them have reached the conclusion that the "defence of their respective interests" is of sufficient importance to warrant it. And the only effective method is a resort to force, it would not be difficult for them to find at any time these interests are "threatened either by the aggressive action of some other power or by disturbances in China and Corea." This startling discovery could of course be made simultaneously by England and Japan. Nor is there anything in the treaty to prevent them from seeking redress simultaneously.

However we all know that the policy of maintenance of the *status quo*, the open-door, peace etc. set forth in this treaty was very welcome to Russia. And Dr. Marey's paper which shows a shrewd observation of racial events leads one to infer that there are students of world-politics who believe that the joy of Russia as regards the treaty is not sincere.

RURAL EDUCATION IN FRANCE.

A good summary of the salient points contained in the seventh volume of the "Special Reports" issued by the Board of Education relating to the subject of "Rural Education in France" is published in the *School World* and it shows how well the French people have endeavoured to tackle the problem of primary education in rural districts and how their educational system has been varied to meet local needs.

Under the Third Republic, in the decade between 1878 and 1887, provision was made for the building and maintenance of schools, and the training and certification of teachers; and, further, Ferry's three-headed scheme rendered education free, compulsory, and lay. Before this epoch elementary education had been, to a great extent, in the hands of the religious orders and the local clergy; but by the law of 1886 these schools were divided into state and private schools.

The entire cost of the state schools is borne in carefully adjusted proportions by the state, the department, and the commune; in the English phraseology, by the central, local, and parochial authorities, and *la morale* is taught in the place of any denominational religion. The private schools, on the other hand, receive no aid except from their promoters; they are subject to inspection only as to morals and sanitation, and are gradually being starved out. Still, in 1897, out of the six million children receiving primary education, one-fourth were in private schools. Decentralisation has been the keynote throughout.

Thus, in 1878, the onus was thrown on the commune of providing the buildings, with state aid; in the next year that of starting a training college was thrown on the department; even in the higher primary school, though the director is appointed centrally, yet that official in council with his staff draws up the programme of work for his school; and finally, for the purpose of education, France was divided into seventeen academies (universities), each responsible for the primary education of its area.

The "rector" is appointed by the President of the Republic, and has the normal and higher primary schools under his immediate control; for the ordinary primary schools there is an "Academy inspector," who has under him a staff of ordinary inspectors. These "Academy" or as we should say "chief" inspectors, seventeen in number, are "the real pivot between the central authority and the schools"; in general they have been masters in secondary schools; while the ordinary inspectors are selected by competitive examination. At first these were generally taken from the ranks of the elementary schoolmaster, but a regulation requiring the attainment of certain degrees has somewhat restricted the field, and they are now almost entirely taken from the teachers in the normal and higher primary schools.

It may be noted that in France the elementary schoolmasters are paid directly by the State.

BISMARCK ON AMERICA.

The *Century* for May contains a record of "Conversations with the Four German Chancellors," Bismarck, Caprivi, Hohenlohe, and Von Bulow, concerning trade and tariff between Germany and America. Bismarck's downright criticism of America, spoken two months before his death, is thus given by the writer of the article, Wolf von Schiorbrand, who says: "After a few introductory remarks by me, Bismarck told me, in his curt and somewhat *burschikos* manner, to take a seat opposite him. I drifted into some talk about the attitude of Europe, considered none too friendly towards America at that time; and from that to the Monroe Doctrine was but a step. Then Bismarck was roused. I knew him to be the declared foe of that idea."

"That is a species of arrogance peculiarly American and inexcusable," said Bismarck, wrathfully, and his eyes gleamed "You, in the United States are like the English in that respect: you have profited for ages from dissensions and ambitions on the continent of Europe. That insolent dogma, which no single European power has ever sanctioned, has flourished on them. And how will you enforce it? And against whom? The powers most interested, now that Spain is out of the way, are England and France, the two leading naval powers. Will you drive them off American waters with your pigmy navy? The Monroe Doctrine is a specter that would vanish in plain daylight. Besides, the American interpretation of this presumptuous idea has itself varied constantly, and has been buried out of sight for many years at a time. There is no definition of the idea that has ever been universally accepted in your country. I remember an incident during the war between Chili and Peru which illustrates that at that time, for instance, the Monroe Doctrine was virtually dead. We had some information which made us suspect that the Washington Government intended to interfere either as an uncalled-for peacemaker or else as an arbitrator. At that time, as now, Mr. White represented the United States in Berlin, and I sent Lothar Bucher from the Foreign Office to him to ascertain, if possible, whether these rumours were true or not. Mr. White assured him that they were not but I insisted on something more definite than his mere belief, and so Mr. White drew up a cablegram to his Government before Bacher's eyes and in a short while got his reply and it emphatically denied these reports and furthermore gave assurances that no such step was contemplated. And so it proved. At that time, then the Monroe Doctrine was as good as dead."

CHANDRASEKHARA SIMHA SAMANTA.

Mr. E. Walter Maunder, F. R. A. S. the well known writer on 'Astronomy without a telescope' in the columns of '*Knowledge*' contributes to the May number of that journal under the significant title 'A Modern Tycho' an interesting article on the life and labours of Chandrasekhara Simha Samanta, a near relative of the Raja of Khandapara, one of the tributary chiefs of Orissa and a celebrated astronomer of the ancient type living in modern times. Here is a brief account of his life and labours.

At the early age of ten, having been taught a little astrology by one of his uncles, he became most anxious to measure on his own account the positions of the stars in their nightly movements and by the time that he was fifteen years of age and had learned to calculate the ephemerides of the planets and of the risings and settings of stars, he was deeply disappointed to find how great was the discordance between his calculations and what he actually observed. In this difficulty Chandrasekhara had to work out his problem unaided. He had to make his instruments for himself; to some extent he had to devise them. The one of which he was fondest is a tangent staff consisting of a thin rod of wood twenty-four digits long, at the end of which is fixed another rod at right angles in the form of T. The cross piece is notched and also pierced with holes equal to the tangents of the angles formed at the free extremity of the other rod. In his discussion of the moon's motion he made the discovery—independent and original on his part—of the lunar evection, variation and annual equation which found no place in the earlier Siddhantas.

Of the results of his labours, Mr. Maunder remarks:—

To have obtained such important results and so high a degree of accuracy, by naked-eye observations and with entirely home-made instruments, and in the utter absence of modern book learning, is a striking illustration of what resolution can effect. Chandrasekhara has been compared to Tycho Brahe, and the comparison is in many ways a just one, though the recluse of Orissa lacked many of the advantages possessed by the noble Dane. As to the accuracy of Tycho's work, it will be remembered that Kepler was led to the first of his three great laws by finding that his theory of the circular motion of the planets was irreconcilable with an observation of Mars by Tycho by eight minutes of arc—but one-fourth of the moon's diameter—

Kepler concluding that it was impossible that so good an observer could be in error to this extent, abandoned his hypothesis and tried that of motion in an ellipse. In the recluse of the Orissa village we seem to see one of the early fathers of the science, long centuries ere the telescope was dreamed of, as he grappled with the problems which the planetary movements offered to him for solution. More than that, he affords an example of the achievements within the reach of the naked-eye astronomers, and a telling illustration of the precision which patience and practice can give to hand and eye. And these are always needed. For be the telescope ever so good and powerful, still that which is by far the most important, is the man at the eye-end.

INDIA AND AN IMPERIAL ZOLLVEREIN.

Economicus contributes a short article to The *United India*, on this subject. He begins by observing that people in thinking of a commercial federation of the British Empire shut their eyes to the fact that the happiness of the whole depends upon the happiness of the parts. So long as the commercial and industrial prosperity of the units composing the federation is not secured, the federation is not likely to achieve its object. *Economicus* proceeds:—

The leading idea of this Commercial Federation of the Empire is that there should be Free-trade between the different parts of the Empire and Protection against all foreigners. This proposal ought in my opinion to satisfy neither those who advocate the continuance of the present policy of Free-trade for India, nor those who wish to substitute Protection instead. The unequal competition that has been introduced by the regime of Free-trade is mostly between Indians and Englishmen, and an Imperial Zollverein will only accentuate this inequality by shutting out foreigners other than Englishmen. The chief plea for protection in this country is the necessity that exists for the creation of a diversity of occupations, of a due proportion between agriculture and manufactures by protecting our infant industries against the hostile competition of nations that are, in economic matters, more favourably situated. An Imperial Zollverein that protects our industries only against Germany, the United States &c., and that omits to protect us from our most formidable competitor, England, is certainly of no value, at least so far as we are concerned.

GREAT BRITAIN'S COMMERCIAL POSITION.

The most important contribution in the current number of the *Idler* is a criticism by Sydney Brooks concerning chiefly the future position of Great Britain in regard to politics and commerce. The writer begins by pointing out the gradual growth of the commercial supremacy of Great Britain and the peculiar advantages she had to secure the manufacturing monopoly of the earth. But the ownership of the monopoly, the writer points out, was not conducive to the vigilance of Englishmen who were run away with the idea that their commercial position was too strongly entrenched to be in danger of attack. He adds :—

Their wealth, their power, their prosperity caged them up in a fool's paradise of security and indifference, and hence have flowed many of the characteristics that to-day handicap the English in the new age of competition. That fatal complacency of theirs, their lordly, unaccommodating ways of doing business, the national myopia that will never unreservedly admit that English methods are not the best, and the short sightedness that will not risk a pound to-day to earn five next week—all these traits are the product of that halcyon age of monopoly, when the rest of the world had either to buy from England or to go without.

As in commerce, so in education. The universities cling to the dead languages and hardly make an effort to equip the youth of the country for life of to-day. Even to Oxford and Cambridge which are the pride of every Englishman bequests and gifts come as rarely as Angel's visits. Nor does the State step into the gap left vacant by individual indifference. Education in England is free and compulsory but the best English Board School, Mr. Brooks goes on to remark, hardly reaches the standard of the worst of the American public schools and falls far below the average maintained in Germany. He proceeds :—

Compared with their two great rivals, the English do not appear really to believe in education, or, if they do, they are over-ready to seize on the smallest obstacle as an excuse for not acting on their belief. One never quite gets rid of the idea that in England cricket is thought more of than knowledge.

Nor is it alone in commerce and education there are causes for complaint. England though politically a democracy is anything but democratic in spirit. It is a democracy presided over by a monarchy and ruled by an oligarchy. The habit of mind that prevails in the cabinet is of an aristocratic flavour.

It cannot help being tender of antiquated privileges, vested interests and the venerable practices of the pre-competitive age. It thinks more of good form than of solid work, prefers elegance to efficiency, and perpetuates

the disastrous idea that Government is an affair of charming manners and the small arts of condescension.

But after all the causes of England's relative decline lie mainly in herself. Mr. Brooks is no pessimist and is hopeful of a bright future. He writes :—

The great need of England is science, and the next decade or two will show how far she is sincere in wishing to equip herself for the life of the twentieth century. If she re-organizes her educational system after the German model, if she strenuously seeks to remove the national curse of drunkenness and to combat pauperism by the erection of sanitary dwelling-houses and the adoption of American methods of transportation, if she acts in earnest on her latest and most useful discovery that business methods are not out of place even in Government offices, then there is no reason why the twentieth century should not be as bright a page in the national history as the nineteenth.

The writer next passes on to consider the schemes that have already been put forward for binding the colonies still closer to the mother country.

One for a gigantic system of Imperial defence, with every colony contributing its share to the naval and military forces; another for a Pan-Britannic Senate composed of delegates from the self-governing colonies, sitting at Westminster and thence superintending the affairs of the Empire; and a third for a customs union, an Imperial Zollverein, co-terminous with and restricted to the Empire and directed against the rest of the world.

Of these the writer clings to the first as practicable. Something had been done in the matter of imperial defence before the Boer war broke out. The colonies were ready to pour out their blood and treasure in defence of the Empire. It cannot be long before all the self-governing colonies will co-operate in mutual defence in line with the central tendency of British imperial policy. The business of expansion is over. England's future task consists in holding and developing what she has won.

In the matter of Imperial Zollverein, Mr. Brooks makes no definite conjecture as the conditions which could alone make the commercial union of the empire possible have not yet arisen and are not likely to rise for another century. As for the notion of a Pan-Britannic Senate that scheme, too, in spite of Sir Wilfred Laurier's backing, has the fatal blow. The colonies do not want it and their loyalty to England will not falter on that account.

Shakespeare's Macbeth & the Ruin of Souls.

BY THE HON. WILLIAM MILLER, C.I.E., LL.D.

Vice-Chancellor, University of Madras.

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INDIA AND IMPERIAL FEDERATION.

To the May number of *East and West*, Mr. A. Rangasamy contributes an article on the question of "Imperial Federation and India." After discussing at length the idea and aim of Imperial Federation, the writer comes to the conclusion that it does not seem to be within the range of practical politics. He, however, thinks that, in view of the recent development of the new imperialism, some sort of common organisation for the British Empire will soon have to be established. Mr. Rangasamy discusses at length the question what part India should play in such an organisation. There are many who hold that the question of Imperial Federation does not concern India and that it concerns only Great Britain and her colonies. Some politicians hold that India being a mere dependency of the Crown, its institutions or status require no consideration or comment. Mr. Rangasamy points out that such a summary solution of the problem ignores certain fundamental problems of the federation movement.

Mr. Rangasamy discusses the question as to how Britain should strengthen her position in India and observes.

It is needless to state that India is Britain's largest possession in the world. Its area is nearly ten times as large as that of the United Kingdom, and its population is nearly eight times that of the British Isles. Its revenue amounts to nearly as much as that of the wealthiest country in Europe. Its commerce with England is yet more important. It stands first among the British possessions that contribute towards the profits of British trade, and stands only next to the United States and France in the volume of trade carried on with the United Kingdom. Its costly and huge military forces form a substantial portion of the total military and naval strength of Great Britain and are available much more easily than those of the self-governing colonies. Its administrative service opens out a field not merely for the entertainment of a large number of Britain's children but also for the display of their best governing qualities. That a possession offering such material advantages ought to be looked upon by far-seeing statesmen as the most important one in the growing Empire is only a reasonable expectation.

There are, however, weightier reasons for claiming for India a prominent place in imperial questions and schemes of Imperial Federation. Differences of opinion might exist as to the immediate need for, and the particular way of, reforming the political institutions of this country.

But there can be no manner of doubt as to the fact that the present system of bureaucratic government is more or less a transitional stage in the political evolution of India. The mission of Great Britain in India does not end merely with the establishment of peace and order, with the introduction of a strong and highly centralised administration, of uniformity and equality in

administering justice. It is, on the other hand, a more onerous duty imposed upon her to give plenty and prosperity to the poverty-stricken millions of this great country, to give to its peoples the benefits of a free government. In short, it is her glorious mission to work out the political as well as the economic evolution of India.

Yet another important consideration weighs still more strongly in favour of the view indicated above. Alongside of the changes in political ideals and methods which have been indicated at the beginning of this paper, there has also occurred an alteration in the scene of political action. As nationalism has at the present day given way to imperialism, the scene of international politics has drifted from the West to the Far East.

The centre of international complications, in which not merely the Great Powers of Europe but also Japan and the United States are so keenly interested, lies in Asia, and not in Europe, in China and Central Asia, and not in Turkey and Eastern Europe. Even the Afghan question has for the time being been merged in the Chinese question. The progress of imperialism at the present day necessarily involves a fierce competition among the European Powers for the settlement of the unoccupied parts of the earth's surface, for the exploitation of all the available wealth of those regions. We are thus able to see how the opening up of China is fraught with such important consequences to the future of the world. The realisation of the importance of the above remarks will enable anybody to perceive the necessity that there exists for Great Britain to strengthen her position in India.

Such a strengthening does not depend upon the increase of military forces and defences in this country. It does not depend upon carrying to a greater extent the already extremely centralised character of the government. It depends, on the contrary, upon the admission of a larger number of Indians into the real governing body of the country. It depends upon mitigating the poverty of the majority of the population by well-considered schemes of economic improvement. It is on her successful and sympathetic government of this vast dependency, on securing to herself the loyalty and the devotion of India's children, that Great Britain's honour and glory—may, her moral greatness—rest. "If the belief of the great masses of the Indian people," Mr. Lecky significantly remarks, "in the essential integrity and beneficence of English rule is ever shaken, one of the chief pillars of our power will have been destroyed."

If the sense of danger to the progress of the British Empire from foreign rivalries and jealousies has drawn the colonies closer to the mother country and has suggested the idea of Imperial Federation, the sense that that danger lies in the Far East, in China and Central Asia, ought to make England rise to the occasion by trying to draw India closer to herself by introducing judicious reforms into the government of this country.

DEPARTMENTAL NOTES.

Educational.

STUTTERING IN GERMAN SCHOOLS.

In various German schools courses of treatment for the cure of stuttering have been instituted, and in Berlin six specialists engaged by the Municipal Board of Education, devote 12 hours weekly to the work. It is estimated that 1½ per cent. of the children attending German schools stutter. Two systems of treatment are being tried; one gives a vocal drill in sounds that the children find it most difficult to utter. The other method deals with stuttering as if it were a nervous disorder which can be remedied by change of diet, specially by diminishing the amount of meat, by open-air exercise, &c. By this latter method, after three weeks' treatment, 50 out of 93 were almost entirely cured.

IN AID OF COMMERCIAL STUDIES.

A valuable endowment for promoting the higher and more effective study of commerce and industry has been established in connexion with the Owens College. Mr. J. H. Gartside, of Hollingsworth, Cheshire, and Overstone Park, Northampton, has generously given the sum of £10,000, which has been applied in the purchase of an annuity of £1,163 for ten years, payable to the college to be used for the provision of scholarships, which are to be known as "the Gartside Scholarships of Commerce and Industries." The scholarships are intended to induce young men that have already received a good education to devote a year at least in Owens College to the special study of subjects bearing on commerce and industry, and then to go abroad for the study of some particular subject, either in Germany or in the United States or some other approved country. The electors to the scholarships—with whom such approval will rest—will in the first instance be the founder of the scholarships, together with two electors appointed by the Owens College and one by the Manchester Chamber of Commerce. The emoluments of the scholar while in England will be about £80 a year; but when he goes abroad a larger sum will be given, which in the case of scholars travelling in the United States will probably be about £250 per annum. The scholars are to furnish reports of their investigations in the foreign countries they visit. These scholarships are intended by Mr. Gartside to be an incentive and assistance to those who contemplate a careful study of commercial and industrial methods.

AN INTERESTING EXPERIMENT.

Dr. Karl Pearson, F.R.S., of University College, has with the help of others, ladies and gentlemen, made a study of the physical measurements of Cambridge students and their careers, to find if there is any relation between mental ability and the size and shape of the head. All the subjects being of like nurture and habits, there was less chance of mistake than if they belonged to different classes. The results go to confirm an earlier deduction of Dr. Lee, namely, that there is no marked correlation between ability and the size or shape of the head. They are also borne out by an investigation of Dr. Karl Pearson on school children. His final conclusion is that very brilliant men "may possibly have a very slightly larger head than their fellows, but taking the general population there is really a very insignificant association between size of head and ability."

A PLEA FOR A TRIPOS IN ECONOMICS.

Prof. Marshall laid before the Senate of Cambridge University (April 11) a vigorous plea for the establishment of a Tripos in Economics and Political Science, these subjects having no due scope as a part of the Moral Science Tripos. He says:—

If similar economic changes continue for long, and go much further, our surplus of revenue over expenditure, available for naval and military use, will be less than that of Germany. England is not, and probably never again will be, completely mistress in her own house. She is not free to weigh the true benefits of a higher culture is a more leisurely life against the material gains of increased economic vigour, without reference to the rate at which the sinews of war are growing elsewhere. There is need for a larger number of sympathetic students, who have studied working-class problems in a scientific spirit; and who, in later years, when their knowledge of life is deeper and their sense of proportion more disciplined will be qualified to go to the root of the urgent social issues of their day, and to lay bare the ultimate as well as the immediate results of plausible proposals for social reform.

In the course of his plea, Prof. Marshall strongly urged that a knowledge of economics is now of vital importance not only to the legislative, executive, and diplomatic corps, occupied with economic issues of their time, but also to business men. He also suggested an outline scheme. Meantime, a memorial requesting the Council of the Senate to nominate a syndicate to inquire into and report upon the best means of enlarging the opportunities for the study in Cambridge of economics and associated branches of political science has been numerously signed by members of the Senate.

Literary.

THE SANATANA DHARMA CATECHISM.

We have received from the authorities of the Central Hindu College, Benares, the first of a series of three Text Books, intended to train the young in the principles of religion and morality as taught in the Hindu Shastras. The *Sanātana Dharma Catechism* is intended for the use of little boys and girls, in families and in the Primary Division of Schools. It is published in English, and we are informed that it is being translated into Hindi, Urdu, Bengali, Gujarati, Marathi, Canarese, Tamil and Telugu. Its price is only anna 1. We learn that the second book of the series the *Sanātana Dharma Elementary Text-Book* is in the press, and will be issued in the summer. It is intended for the use of boys in the Middle and Upper Divisions of Schools, and for elder girls. In this book Hindu teachings will be simply explained, and stories given illustrating the virtues enforced. There will also be a selection of Sanskrit Slokas at the end of each chapter, illustrating the chapter, and intended to be committed to memory. Its price will be Annas 12 in boards and Re. 1 in cloth. Students will be supplied at Annas 8. The *Sanātana Dharma Advanced Text Book* is also in the press. It is intended for the use of College students. Each teaching is supported by copious quotations from the Vedas, Manu the Puranas and other sacred Sanskrit books. Its price will be Re. 1-8-0 in boards, and Re. 1-12-0 in cloth. Students will be supplied at Re. 1.

HOW LAVENDER WAS NAMED.

Etymologists have agreed to trace the word "lavender" to *lavare* (to wash), through the Italian *lavanda* (washing) which gave *lavandula* and *lavendula* in medical Latin. The theory of this derivation was that the plant was used for perfuming baths, or else that it was placed among washed linens. Dr. Murray considers that this is not a likely sense development. He finds that the earliest form of the term was "livendula," and suggests that the origin may have been from *livere* (to be livid or bluish), relating to the colour of the flower. It is not certain that the name has not changed in its application, for old plant names, he remarks, were often applied very loosely.

THE DUTY OF THE JOURNALIST.

The thirty-ninth anniversary dinner of the Newspaper Press Fund was held at the Hotel Metropole on the 27th ultimo, Lord Alverstone, Chief Justice of England, who presided, observed that the respectable portion of the Press was by far the larger portion, and he was perfectly satisfied that honest, independent, and right-thinking journalists despised and scorned the gutter press as much as people outside did. Those who contributed

to the literary side of journalism had a very difficult task to perform. They must keep themselves absolutely *au fait* with all the questions of the day, and be prepared to guide, and not to follow, public opinion. They had also to deal with that part of journalism which he thought presented many difficulties, and that was the public craving for personal information. (Hear hear.) It was certainly trying, but still, no one must make any complaint provided the matter was honest and fair, in good taste, and without ill-feeling. A public man ought not to shrink from criticism of that sort in the Press (Cheers.) The honest criticism of a free and honest Press was one of the safeguards of public life, and was quite distinct from the fawning kind of reputation of domestic details, which were not required to the public (Cheers.) Because he regarded the Press of the country as a great power for good, he ventured to advocate the claims of the Press Fund. It has also a claim upon a support because it was founded mainly on the principle of self-help. Since its formation in 1864 it had disbursed £ 40,000 in more than 2,200 grants, a record of work of which any institution might be proud. (Cheers.)

SUCCOUR FOR ST. PIERRE.

So grim a horror paralyses grief:

An awe-struck world in silence stands aghast,
Unable to conceive how time so brief

Could consummate catastrophe so vast.

The startled people scarce could draw a breath

Before their town had changed into their tomb;

Their shout of warning proved their cry of death,

The flame that flashed their danger dealt their doom!

For one brief moment Nature seemed to raise

The veil that serves her mysteries to screen;

Then, all the blacker for that transient blaze,

A blinding darkness shrouded all the scene.

And man, still baffled, ignorant still stands,

Not knowing why such horrors blot the sun,

Unable still from Nature's Titan hands

To wrest the secrets known as yet to none.

But what he *does* know is that, as of old,

When Death is busiest, pity's needed most,

And that when mourners have to be consoled,

'Tis time that Charity were at her post.

Here, then, is work in which we all can share—

Not to explain, but mitigate, the shock;

To soothe those sorrows, bred of dark despair,

That in the train of grim disaster flock.

Feeling how petty are our ends and aims

In face of this Titanic holocaust,

Let us respond to the unspoken claims

Of those who all but life itself have lost!

And let the force that surer made their doom

Now help to flash them news of our design;

So that with radiance piercing through the gloom

High in the heavens the Star of Hope may shine!

—Truth.]

Legal.**A PRISONER'S RIGHT TO CROSS-EXAMINE HIS BROTHER PRISONER.**

A strange question under the Prisoners' Evidence Act was raised on April 26 before the Court for the consideration of Crown Cases Reserved. Two prisoners were indicted before Mr. Justice Ridley at the Leeds Assizes for offences under the Debtors' Acts, and amongst other things for conspiring to cheat a banking company. Each pleaded not guilty. At the close of the case for the Crown each prisoner elected to give evidence upon oath, each gave evidence exculpating himself and tending to incriminate the other prisoner who was charged with the same offence. Counsel on behalf of each prisoner claimed the right to cross examine the other prisoner upon the evidence given by him against his co-partner. Counsel for the Crown contended that was not admissible, and Mr. Justice Ridley upheld that contention, and excluded all cross-examination of one prisoner on behalf of the other. The jury found the two prisoners guilty. The question for appeal was whether, under the circumstances, counsel for one prisoner was entitled to cross-examine the other prisoner upon his evidence. The Lord Chief Justice said the case was of very general importance. The Court was of opinion that under the circumstances counsel for either prisoner could cross-examine the other prisoner. For this reason he thought the ruling of Mr. Justice Ridley was wrong and the convictions must be quashed. The other judges concurred.

SLANDER AGAINST NEWSPAPERS.

In a recent decision, the Austrian Supreme Court declared that the crime of slander cannot be committed against newspapers, as newspapers, in the legal sense, are merely "purchasable things without honour." The Society of Journalists passed a resolution protesting against this curious decision, declaring that newspapers commonly express the intellectual and moral personality of the editors and authors, and that consequently vituperations directed against a newspaper are directed against the writers themselves.

THE LAW MAGAZINE AND REVIEW.

This Journal for May contains among others the following articles: Law in the Emblem Writers by James Williams D.C.L., L.L.D. The Judicial Committee and the Indian High Courts by an Ex-Judge. The Doctrine of Consideration by Rankine Wilson. Criminal Statistics, 1899. Drunkenness and Crime by R. W. LEE, B.C.L. Views on the Relations between England and America by Burton Smith. The Reform of the Licensing Laws. By H. J. Randall.

There are also some interesting notes on International Law and on recent cases.

RESPONSIBILITY OF A STATE FOR ACTS OF ITS CITIZENS.

It seems to have been suggested that the abduction of Miss Stone, the American missionary, by brigands in Turkey, and her ransom from them paid by the American Government, were grounds for claiming pecuniary compensation from the Turkish Government, and it has been pointed out in support of the Porte's disclaimer of any responsibility in the matter, that the lady had received warning from the authorities of the danger of travelling through a wild district without any escort; that the captors left her north of the Turco-Bulgarian frontier; and that no government has admitted its liability for ransom paid to criminals; *e. g.*, Italy for similar detentions in Calabria, Tuscany and Sicily, Russia in the Caucasus, and the United States for kidnappings or robberies on the trans-continental railway lines between New York and San Francisco. The assumption that the capture and detention took place on Turkish soil and by Turkish subjects does not decide the question. While it must be admitted that a State must in a general sense provide itself with the means of fulfilling its international obligations, it is also true that a government cannot be required to provide itself with the most efficient means possible for that purpose, nor is it bound to alter its form of administration in order to give absolute protection to the interests of foreign States. (Hall, p. 230.) A State seems to fulfil that duty as regards foreigners if they are not placed at any disadvantage with native subjects, and if they are given notice of any special circumstances which render it inadvisable to visit any particular parts of its territory. After such warning they go at their own risk. A State is no more bound to make good losses or damage caused to life or property of foreigners within its territory by isolated acts of individuals (unless such as it is well within its competence to suppress and punish), than it is for losses caused by civil commotions, insurrections, or foreign war and invasion; but such foreigners are confined to the remedies available by the municipal law of the country. The act of an individual citizen, or small number of citizens, is not to be imputed without special proof to the nation or government of which they are members (Phillimore, I. cxxviii): and allowance must also be made in this case for the special circumstances of the Turkish administration. It has been pointed out by Hall (P. 231) that this question of State responsibility has not been adequately discussed by jurists; and the tendency of present opinion is to enlarge the scope of the principle. This is especially noticeable in the case of neutrality; and discussion has recently taken place as to the advisability of all nations recognising their responsibility in this case, by uniform municipal legislation on the lines of that existing in the United States and Great Britain, which would fill a gap in the present system of international obligations.—*The Law Magazine and Review.*

Trade & Industry.

THE USES OF CASSAVA.

In the *Osmopolitan*, Mr. Packard points out the astonishing agricultural possibilities of cassava, better known as tapioca. It is a bushy shrub growing to about five or six feet in tropical and sub-tropical climates, and its roots produce more starch per acre than any other vegetable or grain. In South Alabama, Mississippi, Georgia, and Florida its cultivation is spreading with great rapidity. It thrives best in the light sandy soil which before was thought not of much worth. The average yield of the roots gives eight tons to the acre. The starch from these roots costs only 24½d. per lb., and it is said to be far superior to wheat starch at 3d. per lb. The gain in using cassava for fattening animals, as compared with the old methods, is stated to be about 30 per cent. on a seventy-day test. Hitherto artificial fertilisers have been used for cassava in America, but now it is found that several kinds of beans and peas, growing freely in the regions where it is cultivated, form perfect natural fertilisers for it. Tapioca is cultivated in the Straits Settlements, and would no doubt thrive equally well in many parts of India.

IMITATION MARBLE.

According to the *Danish Export Review* for April, a master builder, a native of Denmark, has succeeded in producing an artificial marble, to which no technical difficulties are attached, and which, as regards delicacy of transition of tints and play of colour, it is impossible to distinguish from real marble. and, moreover, as to cost of manufacture, is stated to be fully able to compete with all kinds of hitherto known artificial marble. The invention has also the advantage that the cost of imitating the most expensive species does not exceed that of the cheaper ones. The Danish invention is a patented secret of manufacture.

At the present stage of development of the manufacture, the inventor is said to be in a position to produce a slab of any kind of marble about half-an inch thick, at an initial cost of about 7d. per square foot.

The *Export Review* adds that a wide field is here open also to foreign enterprise.

A collection of samples is on view at the office of the Danish Export Association, Copenhagen.

PRESERVATION OF FRUITS.

Mr. N. G. Mukherjee, of the Agricultural Department who is an authority on Indian agriculture and industries

is to the fore with a suggestion that the art of the preservation of food-stuffs, that is, of storing up the abundance of one year for use in a year of scarcity, should be taught in every rural school in India. Mr. Mukherjee's idea is to teach the scientific method adopted in Europe. He alludes to the canning of fruits, the tinning of fish, and the sterilizing and condensing of milk. The scientific method of preserving food-stuffs is costly, and it is a question whether the poor villagers can profit by it. If, however, the cost could be brought within the resources of the ryot, the sooner Mr. Mukherjee's suggestion is carried out, the better for the Indian agriculturists and the country. The subject is important enough to deserve the attention of the authorities who are racking their brains to battle with Indian poverty.

WHAT BECOMES OF TIMBER.

Some interesting figures quoted in a recent issue of the *Canadian Engineer* form rather instructive reading on the subject of the consumption of timber by various industries. Our contemporary states that over 4,000,000,000 ft. of pine are used annually for matches, the equivalent of the product of 400 acres of virgin forest. On American railways about 620,000,000 cross ties are laid, and 90,000,000 new ties for renewals are required annually. The amount of timber used every year for ties is equal to 3,000,000,000 ft. There are now standing nearly 7,500,000 telegraph poles. The average life of a pole is ten years, so that about 750,000 are required every year for renewals. These figures do not include telephone poles or railway telegraph poles. The amount of timber consumed annually for poles and ties is equivalent to the timber grown on 100,000 acres of virgin forest. For making shoe pegs every year the amount of timber used is equal to the second growth on 3,500 acres of hardwood land. Lasts and boot trees require about 500,000 cords of wood. Although the making of paper from wood pulp is a comparatively new process, the annual consumption of wood for this purpose is equal to over 800,000,000 board ft. of timber, or which it would be necessary, were the trees all growing together, to cut about 80,000 acres of forests. America is now using for the lumber and paper trade about 40,000,000,000 ft. of lumber a year, which is equivalent to about 4,000,000 acres of virgin forest—an area equal to Rhode Island and Connecticut. These figures do not include the wood used for fuel, which is four and one-half times as much. With these statistics in view, it is easy to appreciate the need for scientific forestry.

MEDICAL.

BURYING ALIVE RENDERED IMPOSSIBLE.

It is stated that an eminent German has discovered what he considers an infallible test for distinguishing between persons actually or only apparently dead. He uses a weak solution of fluorescein, a most powerful colouring matter, which, when sufficiently diluted ceases to be poisonous. If this solution is injected under the skin of a living person in two minutes the skin, especially the mucous membrane, is strongly coloured and the body has the appearance of suffering from an attack of acute jaundice. The whites of the eyes are said to assume a clear green tinge, pupil almost disappears and the eye looks as if it were a brilliant emerald set in the face. A drop of blood in a glass of water, we are told, colours it green. In two hours all the phenomena disappear. But in the case of a dead man the solution produces no effect. The discovery puts a new artifice at the disposal of our scientific "magicians."

WHAT HEADACHE POWDERS ARE MADE OF.

A recent case of acute poisoning by 60 grains of acetanilid had a fatal termination in eight days. The occasional reporting of a case of this kind shows to what a surprising extent the use of recently introduced synthetic medicines has been brought. The public has come to the conclusion that these agents may be used with impunity. Cases of chronic poisoning by these drugs are already much more common than is generally supposed. The dangers of opium are now pretty generally known, and it has become our duty to warn sifters against indiscriminate use of the coal-tar products, as it is hardly to be expected or desired that any legislative action should be taken against the sale of drugs which seldom cause immediate death. Acetanilid is the basis of a largely advertised headache powder—*Science Siftings*.

PESTILENCE IN SEWAGE-GROWN VEGETABLES.

It is very desirable that strict investigation should be made into the effects that fruits and vegetables which have been watered with sewage may have on the public health when they are eaten raw. The water used for irrigation distributes contagious germs, and boiling makes these harmless. Cooked vegetables and fruits which are peeled before being eaten are therefore free from risk, but it is very far from being the same with vegetables and fruits which are eaten raw, such as salads and strawberries. There appears to be only one

way of obviating this risk which is, suggests the *Lancet* to have a clause in the licences granted to the users of sewage for cultivation, forbidding the latter to use sewage for fruits and vegetables intended to be eaten raw.

TO CURE INSOMNIA.

A very simple method of inducing sleep in cases of persistent insomnia, and one that has succeeded where many drugs have failed, is: Simply administer a moderate amount of liquid food before the patient goes to bed. This diverts the blood from the brain to the abdominal organs, and takes away the cerebral excitement that precludes sleep.—*N. Y. Medical Journal*.

SORE THROAT.

Everyone has a cure for sore throat, but simple remedies appear to be most effectual. Salt and water is used by many as a gargle, but a little alum and honey dissolved in sage tea is better. An application of cloths wrung out of hot water and applied to the neck, changing as often as they begin to cool, has the most potency for removing inflammation of anything we ever tried. It should be kept up for a number of hours; during the evening is the usually most convenient time for applying this remedy.—*Health*.

MALE AND FEMALE BRAINS.

A physician who has had much experience of the insane has examined the brains of one thousand six hundred subjects. He comes to the conclusion that nature makes palpable differences between male and female brains. First, there is a difference in weight, the male being heavier, possibly by an ounce, relative to weight of body; second, while the frontal lobes are equal in the sexes, the parietal are larger in the male and the occipital in the female, who consequently has quicker perceptions; third, the female brain is less convoluted in the grey matter and has less service; fourth, the blood supply is more copious in the anterior lobes in the male, and the posterior has a large supply in the female, and these parts have different activities. The blood of the female is also poorer in corpuscles, there being half a million less in a cubic millimeter. He fears that the tendency of too much education or intellectual development in women is to make them lose beauty. He instances the Zoro woman of India. They are supreme. They woo the men, control the affairs of the home and nation, transmit property, and leave man nothing to do. The result is that they are the ugliest women on earth.

Science.

A CLOCK WOUND ONCE A YEAR.

A clock has been invented that has to be wound just once a year. The movement contains but one heavy spring, which is placed within a drum or barrel. This drum is equipped on the outside with ratchet gears which connect with the train of wheels. This drum revolves once in a month. The annually wound clock is regarded by mechanics as a great triumph. Thirty-day clocks are not unusual and are made in this country and in France. Inventors have been experimenting for years trying to make a clock which will run a year with only one winding. The promoters of the new enterprise say that one of the strong points of the new clock is that it can be manufactured for a low price and will cost little more than clocks that will run only 24 hours.

A NEW RELAY FOR CABLES.

One of the most interesting practical exhibits at the Royal Society's soiree on Wednesday was that of Dr. Alexander Muirhead, the well-known inventor and telegraph electrician and manufacturer. It consisted of his improved Kelvin siphon recorder for receiving messages on submarine cables which is also used for long land wires, his automatic signalling key for cables a very neat compact apparatus and his new cable relay for sending a message received on one cable into another automatically, that is to say without the help of a telegraphist. It is much more difficult to invent a relay for cables than for land wires but the problem may now be regarded as solved. Dr. Muirhead's relay, works on the principle of the syphon recorder, and he was overcome all the principal difficulties in applying this principle in a very simple and ingenious manner. The apparatus has been tested between Cornwall and St. Helena all the way with excellent result. We may add that Dr. O. J. Lodge and Dr. Muirhead have devised a new and better coherent for their wireless telegraph.

DR. BARTON'S AIRSHIP.

Dr. Barton's airship for the War Office described by an American scientific journal as a cigar shaped balloon 180 feet long by 41 feet in maximum diameter, which occurs at 72 feet from the bows. It is divided into three compartments and the central one contains a balloonette 12,000 cubic feet capacity, into which air is pumped to compensate for leakage of gas from the balloon, and keep the whole in shape. The capacity of the outer balloon is 144,000 cubic feet, so that

the aggregate capacity is 156,000 cubic feet, and the lifting power is 10,000 lbs. It is made of Japanese varnished silk, and has a "chemise" or cover, from which are hung the aeroplanes, and their frame of tubular steel 120 feet long.

AEROPLANES.

There are three sets of horizontal aeroplanes, three to a set, one set in the middle, and the others at the ends of the frame. Each aeroplane is 18ft. by 12ft. with an area of 216 square feet and a total area for the nine of 1,944 square feet. They are of Japanese varnished silk on frames with transverse bracing. Mr. Hargreave found from kites that an aeroplane forced against the air at a speed of 20 miles an hour would lift 2 lb. per square foot of its surface. Even allowing only, 12 lb. per square foot, the lifting power of the Barton aeroplanes should be 972lb, which is equivalent to throwing out 972lb of ballast. Six sets of propellers, three on each side, force the airship onward. They are driven by petrol motors, It will travel at a speed of 20 miles an hour, and remaining aloft 48 hours.

UTILISATION OF WATER-POWER.

The development of water-power and its application to the production of electricity are proceeding apace in Europe. In Switzerland several of the largest electrical engineering companies have agreed to form a Joint Committee to investigate the possibility of working the whole of the Swiss railway system by electricity derived from water power. Switzerland blessed above nearly every other nation with a plentiful supply of water-power throughout the year, and there seems to be no doubt that the force available is ample for all the Swiss railways. The question to be studied is the practical one of how this force can best be captured and harnessed. Even in England where comparatively little water-power is available, steps are being taken to utilize more fully than has hitherto been done such power as exists. Such an example as this, says the *Statesman*, and still more the record of what is being done in Switzerland, is most encouraging with regard to the future development of India. The enormous power daily running to waste in the Himalayas is as yet practically untouched. In addition, there is some water-power to be had even in the plains, as for example, in places where the main canals have a change of level. There is probably no more useful work to be done than the institution of a careful investigation of the available water-power in India, and of the best means of utilizing it.

General.

Mr. CARNEGIE ON CHARITY.

Mr. Andrew Carnegie who was presented with the freedom of the Plumbers's Company, said that generally individual charity was only beneficial when it helped people to help themselves. It was the Swimming Tenth and not the Submerged Tenth who could be greatly benefited.

A CECIL RHODES MEMORIAL.

A memorial to Mr. Cecil Rhodes is about to be erected at Bishop Stortford, his birth place. The subscriptions have been headed by Mr. Walter Gilbey with £ 500, A committee with Earl Cowper as Chairman, has been formed.

THE LIBERAL LEAGUE.

The Liberal League is now formed for the purpose of bringing together, with a view to common action, approvers of the policy expounded by Lord Rosebery, who has issued a manifesto, expressive of Imperial sentiments which recognises Imperial responsibilities and demands national efficiency, the maintenance of our Naval supremacy and a reconciliation with Ireland.

THE TRANSFER OF THE IMPERIAL INSTITUTE

The transfer of the Imperial Institute to the Board of Trade as the gift of the nation is about to be effected by an unopposed Bill in Parliament. The funds, comprising about £ 140,000, belonging to the Institute will be transferred to Trustees among whom are the Secretary of State for India. An Advisory Committee will be appointed.

THE LITIGIOUS NATIVE.

Mr. H. C. Richards, M. P. who recently made a tour in India and Burma, interviewed by a representative of the *Financial News* made the following observations on the litigious native :—

"The natives are very fond of the law courts, I believe "

"Yes," assented Mr. Richards, "and that bears out the point I have just mentioned. The enormous amount of litigation in India shows how much the natives have to spend and how readily they waste it in lawsuits. Looking at the legal statistics, it will be found that in 1900 there were over 2,000,000 suits in the Civil Courts, and whilst these suits involved perhaps £19,500,000 sterling, nearly 500,000 were for sums under Rs. 10 and 900,000 for sums not exceeding Rs. 50. At the present moment the Appeal Court of Calcutta has a list 12 ft. long and an officer pointed out to me if the people could, they would, every one of them, bring these suits even to the Privy Council.

It is nonsense to suggest that Great Britain is responsible for the increase in litigation. except so far that the native knows that he will get absolute justice from a European tribunal.

THE POPULATION OF CIVILISED COUNTRIES.

Within the last two or three years most of the civilised nations of the earth have made enumerations of their inhabitants. The results of these censuses are beginning to appear, and comparisons of them with one another are instructive. The following table shows the total population of a number of countries as derived from recent censuses, with the rate of decennial increase and the density of population, expressed in terms of the number of inhabitants per square mile, the third column representing the percentage of increase for the decade, while the outside one shows the density of population per square mile :—

Country.	Date.	Population.	
United States ...	1900	76,303,387	21 26
England and Wales	1901	32,523,242	12 557
Germany ...	1900	56,345,014	14 269
France ...	1896	38,517,975	— 189
Spain ...	1900	18,978,497	3 92
Switzerland ...	1900	3,212,551	10 207
Norway ...	1900	2,231,395	12 18
Belgium ...	1900	6,744,532	11 583
Netherlands ...	1899	5,103,924	13 403
Austria ...	1900	26,107,304	9 225
Hungary ...	1900	19,200,000	11 153
Russia ...	1897	128,922,173	— 15
Sweden ...	1899	5,097,402	7 30
India ...	1901	294,266,701	2 188
Japan ...	1898	43,760,754	— 296
Chili ...	1895	2,712,145	7 9
Peru ...	1896	4,610,000	— 7
Denmark ...	1901	2,447,441	13 160

THE IMPERFECTIONS OF OUR AGE.

Lest his countrymen should grow proud in the belief that they live in an age of civilisation and refinement, Mr "George D. E. Russell"—can it be the one-time Under-Secretary of State for India ?—has written an article in a home paper in which he sets forth with great comprehensiveness the imperfections of the age. The article is a lengthy one. It concludes—"We are living in an age of decadence and we pretend not to know it. Not a feature is wanting, though the worst cannot be mentioned. We are Romans of the worst period, given up to luxury and effeminacy, and caring for nothing but

money. Courage is so out of fashion that we boast of cowardice. We care nothing for beauty in art, but for a brutal realism. Sport has lost its manliness, and is a matter of pigeons from a trap or a mountain of crushed pheasants to sell your own tradesmen. Religion has degenerated into juggling and table turning and philandering with cults brought like the rites of Isis, from the East. As for patriotism, it is turned on like beer at election time or worked like a mechanical doll by wire-pullers. There is not an ounce of manliness in the country; and, as for the woman, if there were a gladiator fight in the Albert Hall, and the beaten man went down, the woman would be ready with their little thumbs. We have the honour of belonging to one of the most corrupt generations of Society. To find its equal we must go back to the worst times of the Roman Empire, and look uncommonly close then."

ANCIENT KINGSHIP.

WHAT THE CORONATION CEREMONY HAS SPRUNG FROM.

Professor F. York Powell delivered the first of a series of three lectures on "English Kings and Kingship" on the 29th ultimo, at the Royal Institution, Albemarle Street Piccadilly.

The heathen king, said the professor, was chosen amid great rejoicings, and was lifted shoulder high and placed on a great stone. On the day of the accession great bonfires were lit on the hills all round the country. This lifting of the king occurred among the Franks, and it survived in the practice of carrying the king and putting him on his throne; and also in the ancient practice of chairing a newly-elected Member of Parliament. The banquet and procession of the Coronation festival was also a survival of an ancient ritual. The banquet was part of a sacrificial feast. The Coronation robes were not Teutonic, but Eastern, in origin; and the dress of the King was a copy of that worn by certain officials of the Roman Empire. In the Coronation ceremony there is a survival of a very ancient custom. When the King is brought into the place where he is crowned, he is supposed to be brought by some light animals; and these cream-coloured horses represent to the present generation exactly what the white oxen did in earlier times.

Professor Powell ended an interesting lecture by quoting from the highest eulogy bestowed upon the king in earlier days, wherein he was described as the man who might have done many things, but refused to do them because they would have brought ill to his people. He

was most generous and courteous to his people, extremely kind, and unprone to anger; and lastly, he was of all men most desirous of good fame. That, concluded the lecturer, can be placed side by side with the desire of King Alfred, who wished to have after death the reputation of a man who had done his duty.

THE DUKE OF FIFE TO BE LORD HIGH CONSTABLE.

It is understood that the Duke of Fife has been appointed Lord High Constable of England for the ceremony of the Coronation. This ancient and historic office has really been in abeyance since the time of Henry VII. It has only been granted *pro tempore*, as it will be now, and as it was at the Coronation of Queen Victoria, when the Duke of Wellington filled it. As Lord High Constable of England the "Iron Duke" rode in the Queen's procession beside the Earl Marshal and Lord Melbourne. They were preceded by the Lord High Constables of Ireland and Scotland, and themselves almost immediately preceded the Queen's carriage.

In ancient days the Lord High Constable and the Earl Marshal were the two most powerful officials in the realm. The Office of High Constable was held by the tenure of the manors of Harlefield, Newman, and Whitenhurst, in the county of Gloucester. It has a hereditary office in the family of the Bohuns, Earls of Hereford, Essex, and Northampton, as the Earl Marshalship is still hereditary in the family of the Duke of Norfolk. It passed from the Bohuns, upon the death of the last Earl to Thomas of Woodstock, Duke of Gloucester. From him again it passed to the issue of Edmund, Earl of Stafford, whose son, Humphrey Stafford, was created Duke of Buckingham. In the reign of Henry VIII, Edward Stafford, the then Duke of Buckingham, was beheaded on Tower Hill, and the office of Lord High Constable was attained. It was, we are quaintly told, thought "too great for any subject" to hold, notwithstanding that Henry VIII. had a drastic way of dealing with the most powerful of his subjects. Since then it has only been revived "for a Coronation or trial by combat." In the first sense it has steadily been revived in the second sense but once. In 1631 there was threat of a combat between "Lord Reay and David Ramsay," and Robert Bertie, Earl of Lindsey, was appointed to act as Lord High Constable. His duty, as a peer, was concerned, would presumably have been to see that everything was "well and fair" in regard to the combat, but it did not come to pass, as King Charles intervened.

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The passing of a Great Hindu Monk.



A glorious light is extinguished and a terrible gloom has been cast over the land. The brightest star that for ten years and more proclaimed in all its splendour and grandeur the glory of God and the divinity of man has vanished from mortal view. He that came of the Lord has gone unto the Lord. The noble soul that early in life cast off all that mortal man holds near and dear, donned the simple yellow robe of the ascetic, took the beggar's bowl in hand and wandered from one corner of the country to another, aye ! crossed the distant seas to proclaim the glory of the Vedanta, is no more. We shall no longer see his majestic figure, nor hear his magnetic eloquence that kept under a spell all that came under its influence. On the 4th of this month, Swami Vivekananda who had been out for a walk in the evening, feeling ill, returned to the mutt at Howrah, assembled all his brother *Sanyasins*, announced that his master's call had come and in a few minutes passed away in peace. It is impossible to adequately give expression to the feelings of genuine and profound sorrow which the news of the premature demise of this great *sanyasin* has caused throughout the land and the sorrow with which the sad tidings will be received in America, the land where he built his world-wide fame. It is equally impossible within the short space of a note written hastily under the influence of great sorrow even to describe in brief the glory of his mission and the greatness of his achievements. To that we shall have to refer often in future. For the present we content ourselves with answering the question, what is the reason of the extraordinary sorrow which his death has called forth ? To say that he pandered to the vulgar patriotism of the people by speaking of the glory of the past would be a cruel lie. No, on the other hand there was no mere scathing critic of the present degeneracy of

the Hindus than Swami Vivekananda. Those that have not had the fortune of listening to his many private discourses have simply to read his many lectures and in particular the one on the Vedanta delivered at Lahore on the 12th November 1897. Therein they will find the Swami's sledge hammer blows on the excrescences that have crept into our religion and life. The secret of his success lay in his sincere but enlightened love for the land of his birth and the religion of his *Rishis*. His religion knew no caste, no creed, no colour; his philosophy knew no systems and sophistries; his sympathy was boundless, and he recognised a brother and sister in every man and woman he met. With the same breath and the same spirit he praised the glory of the Brahma of the Hindus, the Ahura Mazda of the Zoroastrians, the Buddha of the Buddhists, the Jehova of the Jews, and the Father in heaven of the Christians. He despised no religion, no form of worship. Read his favorite song.

"As the different streams, having their sources in different places all mingle their water in the sea, so, O Lord, the different paths which men take through different tendencies, various though they appear, crooked or straight, all lead to thee."

If often he laid stress on the glory of the Vedanta, it was because he felt that in ideal it proclaimed the great lesson which he incessantly voiced forth,—the lesson of the harmony of all religions. Remember the motto which he proclaimed from the platform of the Great Parliament of Religions ! "Help and not Fight." "Assimilation, and not Distinction," "Harmony and Peace, and not Dissension."

The death of such a man leaves a void that will long remain unfilled. This is the great misfortune of India at present. Worthy and capable leaders are few and far between, and when they go, they leave no successors to carry on their work. Swami Vivekananda, however, was a teacher of rare personal charm and power. May we hope that his blessed mantle has descended on some worthy pupil of his ?

Lord Salisbury's Resignation.

The news that Lord Salisbury has resigned the Premiership will by no means come as a surprise to the public. Indeed for some months past it has been persistently rumoured that the aged premier was anxious to be relieved of the onerous duties of his high office. His Lordship has had an honourable record of fifty years of active political life. He first became Prime Minister in 1884, and with the exception of a few years' break in the middle he has been the chief political adviser of his Sovereign and nation. There has been a feeling that of late years his Lordship has not made his personality felt as it ought to have been, and that he has allowed himself to be ridden over in cabinet by ambitious men of his party. But whatever be his shortcomings in that respect, the nation will not grudge the noble premier his well earned repose. It will be a great relief to many to learn that Mr. Balfour has become premier. For recently there has been a fear that Mr. Chamberlain had an eye on the office and that the nation which of late has been infected with Joe's Imperialism might cry out for him. Mr. Chamberlain seems to have accepted the situation, and the news that he has promised his loyal support to the new premier is therefore very encouraging. The empire has just emerged out of a disastrous war which has stirred not a little racial feeling and political jealousy among foreign powers. It would be indeed a great misfortune if at a juncture like this Mr. Chamberlain whom many hold responsible for this most undesirable state of things were raised to the most responsible office of Premier to the Sovereign.


It is stated that Sir Michael Hicks Beach, Chancellor of the Exchequer, has tendered his resignation. The reason for this step is stated by Sir Michael himself. "There is no leader I would more readily support, but the retirement of Lord Salisbury means a break of the traditions I have held all my political life." What these traditions are he has not stated. As we go to press (16th) we read that the names of Mr. Hanbury, Mr. Ritchie, Lord George Hamilton and Mr. Austin Chamberlain are mentioned as the successor of Sir Michael. Whoever may succeed we may venture to affirm that for aught we know India will only be too glad to bid good bye to Lord George Hamilton and will welcome a Secretary of State more sympathetic and less self conceited. It may be of interest to know that the Duke of Devonshire who has taken the place of Lord Salisbury as leader of the House of Lords is now in his seventieth year and is a great landed proprietor. He has been for a long time the official leader of the Liberal Unionist party.

The Illness and Recovery of the King.

The latter part of the last month has been a period of intense anxiety to all classes of His Majesty's subjects throughout the British Empire. While in every part of his world-wide dominion grand preparations were being made to celebrate in a manner worthy of the great event, the coronation which was to have taken place on the 26th June, while representatives of the various monarchs of the world were assembled in the capital city in honor of the occasion, the terrible news flashed forth that the King was dangerously ill, that an operation was found to be imperatively necessary and that the coronation was therefore postponed. The bewilderment which this announcement caused in the minds of all could be more easily imagined than described. The loyal subjects who a moment before were revelling with joy, immediately knelt down in penitence and prayed to God for the recovery of the king. Their prayer has not been in vain. His Majesty has fast improved and the news that the coronation will be held early in August has caused not a little joy. Out of evil cometh good. The sudden illness of the king has given one more opportunity to his subjects in different parts of the world to testify to the intense feeling of loyalty to his throne which prevails everywhere, and His Majesty himself has been deeply touched by the sympathy which was poured forth over the royal bed in suffering. Besides the disappointment of the public in general we must think of the keen anguish of the numerous crowds that must have flocked to London, continentals, colonials, country gentlemen, speculators, adventurers, traders, and dealers of all sorts. These have doubtless suffered great losses, and when we add this amount to the waste of public money necessarily involved in the postponement of coronation festivities, we can form some idea of the extent to which an untimely illness or other mishap of the great affects thousands of innocent folk below them. Few, however, are the great who realise this unconscious responsibility of theirs. King Edward, true son of his mother, seems to have felt this responsibility keenly. With great fortitude he long hid his suffering from his subjects in the hope that he might get through the Coronation somehow; and when the doctors had saved his life and he had regained consciousness, his first thought was of his subjects, and he asked, "Will my people ever forgive me?" Well may his subjects pray, 'Long live the king!'

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INSTINCT IN ANIMALS.

 HERE are probably few subjects which have afforded more material for wonder and pious admiration than the instinctive endowments of animals. "I look upon instinct," said Addison in one of his graceful essays, "as upon the principle of gravitation in bodies, which is not to be explained by any known qualities inherent in the bodies themselves, nor from any laws of mechanism, but as an immediate impression from the first mover and Divine energy acting in the creatures." According to this view instinct is an ultimate principle, the natural genesis of which is beyond the pale of explanation. But this is not the view of modern science. Modern science regards instinct as a product of evolution and endeavours to explain the phenomena it presents in terms of progressive heredity.

And the investigation of these phenomena opens up wider questions than may at first sight be obvious. On the one hand it is in close contact with far reaching biological problems; on the other hand it leads to results which are important for psychology. And if to know himself and his origin is the intellectual aim of man, if, as science affirms, man is the product of processes which have been unfolded through the long ages of the earth's history, if, as the philosopher phrases it, in man the product at last becomes self-conscious and may even dimly or clearly pierce to the underlying cause, then the study of organic and mental evolution, in any of its phases, cannot be a trivial, or unprofitable study. It is as affording a point of contact between mind and body, in the course of their common evolution, that the phenomena of instinct have, I conceive, their chief significance.

It is among the insects and their allies that some of the most striking examples of instinctive behaviour are found. We say that it is instinct which enables the caterpillar to spin its silken cocoon, or the blow fly to lay its eggs in the

carcasses whose tainted flesh shall supply food for the maggots when they are hatched. Let us briefly consider a particular case of instinctive behaviour. The Gucca is a genus of American liliaceous plants with large pale sweet smelling flowers, dependent for fertilization on a small straw-coloured moth of the genus *Pronuba*. Just when the Gucca blossoms in the summer the moths emerge from their chrysalis cases. They mate; and the female then flies to a flower, collects a pellet of pollen from the anthers, proceeds to another flower, pierces the pistil with her sharp ovi-positor, lays her eggs among the ovules, and finally darting to the stigma stuffs the pollen-pellet into its funnel-shaped opening. If the flower be not thus fertilized the ovules do not develop; and if the ovules do not develop the grubs which are hatched from the moth's eggs die of starvation. There are enough ovules to supply food to the grubs and leave a balance to continue the race of Guccas.

Such are the bare facts of the case. Now let us consider their meaning, and first from the point of view of direct observation. They cannot be explained as due to imitation. There is no suggestive model or copy to imitate. Nor can they be the outcome of individually acquired experience, for the behaviour is not gradually learnt, but is carried out with admirable exactitude and perfection the first time that the appropriate occasion presents itself. The Gucca moth therefore displays modes of procedure which are inherited in all their definiteness and exactitude. We may say then that from this observational point of view instinctive behaviour is inherited in a relatively perfect form and is prior to individual experience. And what shall we say of it from the psychological point of view? Here we are on more delicate ground. It is not easy to put oneself in an insect's place and say by what feelings its actions are prompted. We may fairly suppose that the insect's mind is affected by sights, scents and sounds, by sensations accompanying the movements of its

limits, and by vague and indefinite internal sensations. In other words we may fairly regard the insect as the subject of varied sensory experience. But is this all? May there not be inherited experience which guides the performance to its foreseen end? Take the case of a blow fly which instinctively lays her eggs in tainted flesh. The conditions of the case preclude the supposition that the fly has any knowledge based on her own experience, of what will be the fate of her eggs. It is true that she was herself hatched from an egg laid under similar conditions and nourished on decomposing flesh. But even supposing that on emerging from her chrysalis sleep as a fly she remembered the events of her maggot infancy, only by a somewhat elaborate process of rational inference could she reach the conclusion that, since as a maggot she found herself in a carcass, her mother must have laid eggs therein, and, if her own little ones are to be nourished, she too must do likewise. Few will believe that the fly can argue thus; fewer still that the *Gucca* moth could reason out the causal connections in the more intricate chain of events which I have described. But though knowledge based on individually won experience is practically excluded, may not the fly and the *Gucca* moth inherit the knowledge gained by their progenitors and more remote ancestors? I do not think this question can be answered for insects. We know too little about the mental processes of the invertebrates and their psychological genesis to do so.

Let us therefore transfer our attention to vertebrate animals nearer to ourselves in the scale of life. It is clearly desirable that we should exclude as far as may be the influence of the parent as a possible source of instruction and a working model for imitation. Birds, therefore, especially those which are active at birth, suggest themselves as convenient subjects for observation since the eggs can be hatched in an incubator.

In this apparatus the conditions for the development of the eggs are artificially supplied. All

that is required is a suitable distribution of warmth, moisture and fresh air, together with a daily turning of the eggs. Under these simple conditions a truly wonderful series of changes occur. From the comparatively structureless egg a chick is developed which, when it emerges shows (1) a very complex and beautiful structure, and (2) a number of organized and nicely regulated movements. It is not only a delicately fashioned organism, but a going concern, a living creature. No one can say that the marvellously perfect mechanism of the eye has been fashioned within the egg by the intelligence of the chick. If some one says that it is fashioned by the Power with which all nature is instinct I certainly shall have no quarrel with his contention unless he dogmatically denies that what we term evolution is the manner in which that Power is manifested. That however is another question, one of profound interest and importance, but not the one now before us. The present point is that the eye is not fashioned by the intelligence of the chick and if this be so, in the case of so beautifully adapted a structure as the eye, there is surely no reason why we should deny that the most complicated and nicely adapted movement may be performed independently of any intelligent guidance on the part of the chick. In other words if we believe that the eye is a product of organic evolution, there seems no reason why we should not believe that the behaviour we term instinctive, no matter how complex it may be, is also a product of organic evolution and independent of any intelligent guidance either individually acquired or inherited.

Now the chick or other young bird does perform a number of beautifully adapted actions, behaves in certain well-marked ways, under circumstances which preclude the supposition that they have been learnt, as we learn to play tennis or throw stones. Such are pecking, walking, running, swimming, diving, flying, scratching themselves, pruning the feathers, scratch-

ing the ground, sand-washing, bathing and so forth. These are not necessarily all exhibited the moment the bird is hatched. Some of them are deferred till a comparatively late period of development. Among such deferred instincts are probably display of plumage, song, nest building, love antics, and aerial evolutions, all more or less closely associated with the pairing impulse. We cannot say for certain, however, that all of these are wholly instinctive and occur in birds which have been isolated and thus shielded from the effects of imitation, under the suggestive influence of the traditional procedure of their race. The characteristic of all truly instinctive modes of behaviour is that they have not to be learnt, that they are carried out prior to any individually won experience which can afford information as to the nature of their effects. There is still, however, the possibility of inherited knowledge. Does careful observation give us a basis on which to draw sound conclusions on this head? The answer to this question must be again deferred for awhile.

There is no doubt that to peck at a small near object is a piece of instinctive behaviour, that is to say, it is a mode of behaviour which is inherited in a relatively finished and perfected form and has not to be learnt by the chick. But now observe this. The little bird will peck at *any* small near object, no matter what its nature may be. It makes no difference whether it be a crumb, grain of wheat, maggot, worm, or morsel of crumbled egg; or a bit of gravel, small thread, ink-spot, little piece of paper, fragment of a chopped-up match, its own or its neighbour's toes, a morsel of orange peel, or even its own or another's excrement. Nice or nasty, it is pecked at so long as it is about the right size, at about the right distance. This to begin with. But the chick very soon learns by experience what to take and what to avoid. There are, for example, certain brownish looper caterpillars of which chicks are fond; and there are certain caterpillars (those of the cinnabar moth) ringed with yellow and black, which the

young birds find unpleasant and distasteful. At first both sorts are pecked at with equal zest; but very soon, after a few trials, the loopers are seized with increased avidity, while the cinnabars are left alone. This is clearly something quite different from instinctive action in the sense in which I have used this phrase. It involves selection based on experience. The chick has learnt to avoid some things and to seize others with increased energy. Let us agree to call this selection based on individual experience, this profiting by what has already been learnt, intelligent behaviour. Then we have this clear distinction: an instinctive act is one which is performed without learning and prior to experience; an intelligent act is one which is performed after learning and as the result of experience. This distinction is presumably clear enough. But we have to notice this,—that though the logical distinction is quite clear the two kinds of action are combined when the chick seizes a looper caterpillar with added zest. To peck at something is instinctive; to peck at this looper with added vigour because it has been found palatable is intelligent. So with the cinnabar caterpillar. To peck at it is instinctive; to restrain the instinctive act is intelligent. Such restraint soon becomes the rule of life. But occasionally the instinctive tendency may overmaster the restraint due to the teachings of experience. We may say then that instinct provides a general plan of action which intelligence, by enforcing here and checking there, particularizes and guides to finer issues and it is probable that the great majority of the acts we observe in the behaviour of animals are thus joint products, presenting what may be described as a general instinctive ground plan of action modified and guided to particular ends through the daily teachings of experience. The power of flight in birds, for example, is given through inheritance in rough but sufficient outline; but the manifold graces and delicacies of perfected flight are due to the intelligent skill begotten of practice and experience.

Let us now revert to the matter of feeding in young birds with a view to ascertaining whether it throws any light on the inheritance of experience. They begin by pecking at anything of suitable size and within reach; they soon learn to peck only at what is good to eat or necessary for their digestive processes. But surely if they possessed a stock of inherited experience, this individual learning would be wholly unnecessary. If a chick inherited the experience of its ancestors, it would be a mere fool to seize a cinnabar caterpillar which that experience had proved to be distasteful or to take wasps and bees into its bill merely for the sake of verifying for itself, the fact of which inherited experience should supply sufficient information, that they sting. Hence observation tends to discredit the view that experience as such is inherited. A curious fact tends to support this conclusion. Young birds do not seem to peck at still water instinctively. They will run through the water in a shallow tin and not stop to drink. In the absence of the parent bird, or older chicks who have learnt by experience, they seem to find out by chance that water is good to drink. They peck at a grain in the water, or their own toes as they stand in it (and pecking at their own toes is an act to which they are specially prone) or at a bubble on the brim which catches their curious eye. Thus they incidentally wet their beaks. Then they drink again and again—so much so that one may fairly believe that they were thirsty and in need of water. The act of drinking when the stimulus of water is supplied to the beak seems to be quite instinctive. But the mere sight of water does not appear to supply the requisite stimulus. This is probably because under natural conditions they have a mother whose lead they follow. Now she by her actions can guide them to peck at the water; but she cannot teach them to drink in the sense of performing the elaborate act of swallowing. On the hypothesis of natural selection those young birds which under such circumstances were deficient in the complicated instinctive response in-

volved in drinking and swallowing would die of thirst; only those which possessed the instinctive tendency would survive. Natural selection would thus engrain this mode of behaviour as a piece of organic inheritance. But if the hen guides all her chicks to the water natural selection cannot, so to speak, get at them. The parent shields them from its incidence; and this response to the mere sight of water has therefore not become thus engrained. So that here we may get some insight into the manner in which natural selection may have played its part in the evolution of instinctive behaviour.

Be that as it may, the thirsty chick or duckling unaffected by the sight of water affords little evidence of inherited experience. And there are yet other observations which carry with them a like implication. There is plenty of evidence for instinctive timidity in young birds. If you clap your hands, sneeze, play a loud chord on the violin, throw a ball of paper among them, they will show signs of fear, each after its kind. Chickens and moorhens will scatter and crouch, pheasants will be struck motionless, plovers will crouch and lie still. But it is hardly probable that they have inherited memories of sneezes or violins. On the other hand, one would certainly expect, if there be inherited experience, that pheasants and partridges would show signs of fear at the first sight of a dog. But this is not the case. My fox-terrier was trained to sit quietly, though he was trembling with suppressed excitement, in the midst of young birds. So far from showing any fear of him pheasants and partridges would impudently peck at his nose or at the claws on his feet. And I have many times seen little chicks nestle up to him for warmth. On one occasion when a chick did this, my back being turned, he took it up in his mouth and carried it across the room and so within my range of vision. At a look from me he dropped it. But so gently and quietly had he taken it, that the little bird even then showed no more signs of fear of the dog,

than it did of me who had carried it often in my hand. It seems therefore on the evidence so far as it goes that inherited experience, or any thing like a remembrance of what its ancestors have learnt, is altogether out of court. We must explain the facts of instinct in some other way, that is to say, on a more distinctly biological basis.

It will be necessary now to direct attention to a few physiological facts and inferences. The bird, like man, has a brain and spinal cord. And connected with these there are two sets of nerves; one set bringing messages in from all parts of the body and another set carrying messages out to all parts of the body. Now it is generally held by physiologists and psychologists first, that *consciousness is cooked somewhere in the brain*, secondly, that it is called forth *only by incoming messages*, and thirdly, that in some way, not at present well understood, the *brain-changes associated with consciousness, exercise a controlling influence over the outgoing messages*, especially those to the muscles. One more distinction must be drawn. It appears that in the brain there are two groups of centres for the distribution of outgoing messages. In the first place there are centres so constituted by organic heredity as to distribute the outgoing messages to the motor organs or to the viscera with great nicety indeed but quite automatically, that is to say quite irrespective of any conscious guidance. In the second place there are centres so constituted as to augment or check or otherwise modify the outgoing messages (especially to the motor organs) in accordance with the nature of the conscious experience with which their functional activity is associated. The former are the automatic centres; the latter the centres of control. And it is probable that the mode of action of the latter, the control centres, is such as to modify the structure or mode of action of the former, the automatic centres.

Now the conclusion to which modern investigation tends to point is that essentially instinctive

behaviour is due to the unmodified action of the automatic centres, while intelligent behaviour is due to their action as modified by the centres of control, under the influence of messages coming in from all parts of the body.

A brief summary may now be given of what seems to be the net result of a survey of the facts. From the biological point of view we fix our attention on the performance of certain actions and say, for example, that the diving of a water bird is a piece of instinctive behaviour. From the psychological standpoint we fix our attention on the states of consciousness which condition the performance, and say, in popular language that, for example, it is instinct which prompts the duckling to dive. Combining these points of view we may comprise under instinct both the conditioning states and the performance which results.

Accepting instinctive behaviour therefore as a product of organic evolution, it is none the less one which has conscious effects. And these form the basis of that experience and that intelligent procedure of which we see abundant examples in the higher animals. But when we look round upon animal life we find great variety of instinctive endowment. Some animals are so well provided with instincts that automatism seems almost to suffice for the needs of their simple life. Others present little of that stereotyped behaviour we term instinctive. And we may say that the more complex the conditions of life, and the more need there is for a varied application of intelligence, the less stereotyped in its nature is the hereditary automatism. The human infant, for example, is remarkably deficient in well-defined modes of instinctive behaviour. What then in such cases, does organic inheritance provide as the raw material on which intelligence can exercise its office? The reply to this question is that although the material is less organized it is not less abundant. The multifarious random movements of the child, though their inexactness renders the infant terribly helpless, afford a plastic material which intelligence can guide to a richly varied use. And the prolonged period of pupillage or the child is correlated with an unsurpassed range of combination and recombination of the abundant plastic material. The hereditary legacy, though it contains fewer drafts for specific purpose, affords a far larger general fund on which intelligence may draw for the varied purposes of the freer financial existence of a rational being.

C. LLOYD MORGAN.

A TEACHING UNIVERSITY.

IT has become the fashion to speak of the Indian Universities as merely Examining Universities and to attribute great superiority to a different kind of University which is called a Teaching University. The antithesis between teaching and examining Universities has been popularised more particularly through the agitation for reform in the University of London. When the University of London was founded two generations ago, it was intended that its examinations should be taken chiefly by students in a number of affiliated institutions; and to this day there are schools and colleges which are described in their official documents as affiliated to the University of London. But it always had the right to examine candidates who had not studied at these institutions. In those days, when Oxford and Cambridge were small and exclusive, the advantage of access to examinations which led to a degree without residence was greatly prized and widely valued; moreover the Progressives who founded London University were only too glad to see the education their examinations fostered as widely spread as possible, and as large a number as possible availing themselves of their examinations. London University was the foundation of men like Brougham, Radicals who desired the uplifting of the unprivileged, and the modernising of education. Oxford and Cambridge were to them rather the narrow homes of an antiquated system than models to be imitated. Therefore candidates were welcomed whoever they were whether they came from an affiliated institution or not; and it soon came about that the private candidates as we should call them outnumbered those from affiliated institutions. It was obvious therefore that affiliation meant nothing, and the pretence of affiliating institutions and of distinguishing between candidates from affiliated institutions and

others was given up. In the examination-lists the name of the school of a successful candidate was given, as freely when it was one that was not affiliated as when it was; and "Private Study" meant that the candidate had not been prepared at any school at all, not merely that he had not kept terms at an affiliated school. Thus London became in the full sense of the term an examining University; the affiliation which was contemplated by its founders practically died out altogether. Its examinations were thrown open to all. On the other hand it was not in any sense of the word a Teaching University. So far as it was concerned it left study for its examinations to be conducted without any direction other than could be found in its Calendar. There were scores of institutions only too glad to prepare students for its examinations; and its resources were very limited.

The time came when other Universities were founded, and when the open examinations of London were proportionately less dominant in guiding education outside Oxford and Cambridge. Moreover partly through its own success there had been created the necessity for a better organisation of higher education. The older Universities had been reformed; in Manchester and other Northern towns Colleges had been founded by private munificence which provided educational advantages never dreamt of when London University was founded; foreign countries were giving State aid to education; and altogether it seemed that there was a danger lest London although it possessed its great University should be at a disadvantage as regards opportunities for higher study and research. The cry arose for the development of such opportunities. This might be done in two ways: by better organisation of existing institutions, and by the creation of new ones. Obviously the University was the natural centre for both methods. Round it better than any other body could existing institutions be co-ordinated; and if large endowments were to be forthcoming as in the North from civic patriotism, the

University would be the natural object of such liberality. Accordingly London University has been remodelled. While maintaining its open examinations for the benefit of students from parts of the country unprovided with Universities, it has arranged for the incorporation within itself of the chief Colleges in London and its vicinity, and is appealing for funds to enable it to provide for the teaching of new subjects.

The demand for a Teaching University in London has been taken up in India. It is said that the Indian Universities were founded on the model of London, and are therefore examining Universities as it was and therefore need the same reform as it has been subjected to. But those who argue so, forget the difference in the history of the Indian and London Universities. Whereas the latter gave up the principle of affiliation and was content to act as the examining Board of the Colleges which were in existence mainly before it was, the Indian ones have insisted more and more on affiliation and have gradually built up in connection with them a group of institutions almost out of nothing. Though the original constitution of London and Madras was the same, the conditions of the two Universities were very different from the first and their histories have been different. Little wonder therefore that their actual working was very different at the end of last century, before London was reformed. Indeed it would be near the truth to say that the reform which has taken place at London was assimilation to the Madras type. The new London University will be like that of Madras in principle, except that the constituent institutions will in it be congregated in or near the University centre, and that provision is made for open examinations for others than those who belong to affiliated institutions.

It is agreed by all that London has been made a Teaching University. What does this mean? It does not mean that as distinct from the Colleges it

carries on teaching ; though it is true that it hopes that funds will be given to it which will enable it to found professorships to supplement the teaching now given in the existing Colleges. But as yet it has done nothing in this direction ; and it has become a Teaching University by incorporating in itself Colleges that have been for long preparing candidates for its examinations. Madras is already in the form which London reached by its reorganisation. It is as truly a Teaching University as the reformed London. Through its affiliated Colleges it carries on almost all the higher education of the Presidency and neighbouring Native States. And if it be said that London hopes to extend its operations and to supplement the teaching of the Colleges by higher teaching imparted under the direction of the Governing Body of the University as a whole and not connected with any one College, presumably the same is true of Madras. At any rate there is nothing to prevent Madras University accepting endowments of University Professorships if benefactors are forthcoming, as it is to be hoped that they may be.

What is meant by a Teaching University? At Dublin, on the continent of Europe and in America there are Universities which are as it were single Colleges, large it is true and with the power of granting degrees, but after all in principle single Colleges. In Scotland, as a rule, the University may be described as a single Arts College with one or more Colleges for Medicine, Divinity &c., combined with it. So was it at Oxford and Cambridge in their early days. The most interesting spot in Cambridge is the square now enclosed within the University Library, where are the four Schools of the early 15th Century, where, before the Colleges were anything more than Hostels, the teaching of Cambridge was given by the University : the Arts School and those of Divinity, Civil Law and (I think) Canon Law. The University uses the Arts School now for examinations, the issuing of tickets, meetings, anything but teaching in Arts. The change is in-

structive : the University as a body does comparatively little in Arts Teaching ; nine-tenths of the Arts teaching in Cambridge is given by the Colleges. The great majority of Cambridge students go through their course without ever hearing a University lecture. The Colleges provide all the teaching that is necessary in the regular course even for the Honours degrees ; the University provides teaching for what may be called luxuries. To take my own case, omitting the lectures of Westcott, Hort, Seeley and Gardner, to which a wayward taste drew me away from my more regular classical studies, I never attended a University lecture till I was specialising, in my fourth year, in Ancient History and found that the University had stepped in where the Colleges failed and had appointed a Reader in that subject for the benefit of the handful of graduates who took up that study in its higher branches. And yet not one would deny that Cambridge is a Teaching University.

The devolution of teaching to the Colleges is inevitable wherever the Collegiate system is found. Where the constituent Colleges are scattered it is a necessity from the first. So is it in the Victoria University in England, which is in many respects the nearest parallel to an Indian University. That consists of the Owens College at Manchester, the Yorkshire College at Leeds, and University College at Liverpool. In this University there are three equally important centres, and the teaching is left entirely to local arrangement. I believe that there has not been delivered even one University lecture.

An Indian University, Madras for instance, differs in some respects from every kind we have been looking at. As being not a College but an aggregate of Colleges, it cannot be a Teaching University as Trinity College, Dublin, is. Its Colleges being spread over a whole country, it has difficulties that London and Cambridge have not. It differs however from Victoria in having one real centre where the mass of the students are gathered.

Its way therefore lies between the paths of Cambridge and Victoria. Like both it must leave the bulk of regular teaching to the constituent Colleges. It can never provide University teaching supplementary to that of the Colleges for *all* its students that need it as Cambridge can. But it need not dispense with University teaching altogether as Victoria has done. It can bring University teaching within the reach of a large number of its students though not of all. A lecture given in Madras by a University lecturer can be attended by half the students belonging to the University. In time doubtless there will be connected with the Madras University a number of Professorships and Readerships that will make the city a place of richer and wider teaching by far than it is at present ; but teaching for the regular degree will probably continue to be imparted as at present in the various Colleges.

Lectures are however not the only medium of teaching. And there are more immediately pressing needs, which the University can meet better than any College can, the supply of which by the University would be University teaching of the most useful kind. A University Library, University Laboratories, University Museums—these are the first requisites for the advance of the Madras University and its sisters from that class of Teaching University which teaches only through its Colleges to that class which teaches through its Colleges all that they can teach and comes to their aid by providing instruction for its alumni in those departments or with that apparatus in which they are necessarily deficient.

F. W. KELLETT.

MALABAR AND ITS FOLK.

A SYSTEMATIC DESCRIPTION OF SOCIAL CUSTOMS AND INSTITUTIONS OF MALABAR

by T. K. GOPAL PANIKKAR, B.A.,


WITH AN INTRODUCTION BY THE

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AGRICULTURAL CONDITION IN INDIA AND ITALY.

F all the countries in the West, Italy bears a close resemblance to India in agricultural condition. This is perhaps not a little due to similarity in the political and religious past of the two countries. Like India, Italy was the cradle of arts and civilization. The languages of both attained perfection. The climatic conditions of the two countries reach extremes and give rise to numerous and divergent habits and practices. The wealth of both countries with populations enervating in luxurious ease and deteriorating physically as well as morally subjected them to foreign conquests and rule of the sturdy races of the north. Both have more or less the same sort of traditions. In both countries gods walked and fairies danced. If "in Caesar's bounteous reign Tityrus the pride of Mantuan Swain sang on Mincio's banks" Krishna, the lord of the cowherd race played his immortal flute on Jumna's banks in Pandavas' beneficent reign. Both countries gave birth to philosophers whose systems to solve the problem of life still rule the world.

If Italy is the land of the Pope the vicegerent of Christ, India is the land of Sankaracharya the incarnation of divinity itself. If Italy had her Lyola, India had her Asoka. The extent of church endowed property in Italy is only matched by the religious endowments in this country to Matams and institutions of various denominations. The archives in the Roman cells are as sacred as the palm leaf libraries of ancient literature in the caves of the Indian mountains. The social vigor of both nations was shattered and rendered inefficient to hold their own in the world race by priestcraft and superstitious adherence to the complicated systems of dogma and religious ritual.

The natural varieties and fertility of soils as well as their capabilities for irrigation are only matched by those of the Gangetic and Cauvery

plains as of the hilly slopes of Malabar. Why is the Italian peasant poor? Why is he grovelling in chronic poverty and marked for his ignorance and wretchedness? Why does he walk in soleless boots with topless hat? Is there child marriage among them? Is it due to fecundity of birth rate among the Italian population?

As in India there are tenancies of various kinds in Italy. Our Inamdars or freehold proprietors generally let their land for 3 or 5 years. The medium proprietor in Italy leases his land for 7 or 9 years. Even this is considered there too short a period to enable the farmer to effect any improvement in the land and to benefit himself. The landlords there as here are intelligent enough to enter into strict covenants with the tenants. There exists the peculiar feature of the tenant agreeing to carry the materials of the landlord and paying him extras such as fowls, eggs, butter and the like. Here vegetarianism being the rule, the perquisites are confined to vegetables and so many days field or garden labor.

Considerable land in the vicinity of towns passed into the hands of money lenders and capitalists as whose tenants the former owners carry on cultivation. The produce-sharing system largely prevails as in ryotwari and some Zamindary villages in India. Along the Adriatic coast the number of small proprietors is large. Proprietors of small holdings also exist in the Provinces of Milan, Bergamo and Como as numerous as the petty peasant proprietors of the Madras Presidency. The holdings vary from $\frac{1}{2}$ of a hectare to 3 hectares of land. Again there are medium proprietors holding from 100 to 150 hectares (1 hectare = 2.47 acres) employing hired labour as our big ryotwari holders do. As in the well irrigated tracts of Bellary and Salem whole families work day and night in the fields among rocks and ridges to render land productive. Many of these like our Zamindary tenants and petty ryotwari holders find the product insufficient for their maintenance and supplement it by wages earned as day labourers.

With the large proprietors rent is a matter of contract as in our Zamindaries where ryots have no occupancy rights. Farms of 100 to 1,000 acres are let to middlemen at money rents payable yearly or half yearly. Evictions are generally allowable only through courts. The large proprietors like our Zamindars do not cultivate land on their own account. They let it out to tenants and raise the rent as high as possible on every renewal of lease. In Italy it is generally the landlord that stocks the farm, builds farm houses and supplies to tenants agricultural implements, which our Zamindars rarely do. The landlord's interests are very carefully protected, as those of our Zamindars.

In such state of things need there be wonder that the agricultural community was sinking lower and lower in the social scale and lived like serfs on land which they tilled. Absent landlordism and rack-renting cannot but do their work. In India rack-renting is by virtue of contract carried on in all solemnity under scientific principles as in the case of enhancement of assessment of ryotwari land. By what mysterious process the fertilizing power grows in land and to what degree, no one but the Settlement Officer can divine. As if this process is inconvenient or cumbersome the mandate is issued by the Madras Government to increase the assessment by 33 per cent. in the case of the uplands of Godavari. Can there be any justification for such action on the part of Government bound by canons of law and pledged to apply principles of equity and good conscience? A Lieutenant-Governor whose wrath was roused to the highest pitch when by virtue of the provincial contract enjoined in respect of his province by the Supreme Government not much was left him for internal improvement used language which well applies here. During the budget debate in 1896 Sir Alexander Mackenzie said:—"The provincial sheep is summarily thrown on its back close clipped and shorn of its wool and turned out to shiver till its fleece grows again." Is this not applicable to the case of

our *toilers on land*? Is such policy conducive to agricultural advancement?

Not child marriage nor expenses on ceremonial observance nor prolix birth-rate is the cause of the chronic poverty of the agricultural community and its degraded condition. Landlord absenteeism and revisions of land assessment are the main cause. Our Zamindar landlords are fed and pampered by "unseen" hands that work for them. They do not know whose labor it is that enables them to buy African demands and ostrich feathers. They never go and see where the toilers are housed and what they live on. They do not appear to feel they have any obligations to them. There may perhaps be honorable exceptions. Our Government apologists catch at any reed, and say that everything else is the cause of the agriculturists' poverty but the land revenue policy. If our Government wants to improve the agricultural condition in India mere expression of pious wishes will not do. There ought to be real concessions.

The Italian Government compels every landlord to set apart sufficient portion of the farm for cattle grazing but our Government would do nothing of the kind. Ryots had the right of free grazing in forest land but they have lost that right. For implements of husbandry they could freely utilize forest timber. No such right exists now.

It is gratifying to observe that of late the Italian Government has been making stupendous attempts to improve the condition of its agriculturists. During the last 15 years the agricultural possibilities especially of Northern Italy are being gradually studied and worked out. Organizations amongst the agricultural classes are fostered and helped by Government. Government supplies them gratis newest information relating to agriculture. Under State supervision and direction Raffeisen Banks and Luzzatis Banks for the people are increasing in number and affording no small aid to agriculturists. Agricultural Education is receiving much attention. The agricultural output is considerably more than what it was 15 years ago.

The industrial advance too is remarkable in Italy. In five years the production of cotton goods rose from 50 millions to 100 million francs while the exportation of silk increased from 250,000 pounds to 2,000,000 pounds. Education is free and compulsory. There is no doubt that agricultural condition in Italy is steadily advancing. This is so notwithstanding the increase in population. In spite of constant emigration to America and other parts of the Globe the population in Italy is increasing by half a million every year. Increase of population is everywhere increase of national strength. It is not so only in India.

India is an agricultural country and will probably remain so. Unless there be free education and substantial State aid for agriculture to combine with industries, and unless the incubus of periodical revisions of land assessment be done away with there can be no real amelioration of the agricultural condition of India.

That the vast mass of the agricultural population in India is in abject poverty and unable to withstand the effects of one adverse season there can be no doubt. In his letter of 23rd May 1900 to the Lord Mayor of London Lord Curzon said:—"In the middle of May 1897, an area of 205,000 square miles, with a population of 40,000,000 persons, was affected. In the middle of May 1900, the figures are 417,000 square miles (or nearly one-fourth of the entire extent of the Indian Empire), and 54,000,000 persons. In May 1897, 3,811,00 persons were in receipt of Government relief; in May 1900, the total relieved is 5,607,000. At the present moment, if we take the whole of the affected regions in British India, 15 per cent. of the entire population are being supported by Government (in many parts the proportion is nearly double)." This description of the highest Government functionary, though not by any means a complete one, speaks for itself. What can be said of the millions suffering from slow starvation that does not attract Government notice. Whenever rains fail the cry of

famine rings in our ears but Government would have no official information.

Those that suggest as the reason of the general poverty wasteful expenditure on festivals and obsequial ceremonies are either misinformed or deficient in correct observation. It may be true that a few sections of some communities here or there are guilty of such extravagance. This forms an infinitesimal portion of the vast agricultural population of the land, who are notorious for their low standard of living and habits of extreme thrift.

Neither is it true that India is being overpopulated by reason of the religious obligation to lead an early married life. The last census showed that the increase in the population of the whole of India during the last decade was under 7,000,000. The suggestion that the population will soon be doubled is simply extravagant.

No less an authority than Sir William Hunter pointed out "there is plenty of land in India for the whole population: what is required is not the diminution of the people, but their more equal distribution." When the Madras Government was recently interpellated on the question of facilities for the migration of people and acquisition of arable land in favored localities their answer was anything but satisfactory.

Monsieur Tisserand, the Director General of Agriculture in France who, to a large extent shaped the French Ministry of Agriculture and a first class authority in this respect said a short time ago that a Ministry specially for agriculture has become an imperious necessity in every country. He said:—"Everywhere man clings to the land; it is the earth that nourishes him, and like the giant Antaeus, he ever has need to touch it, to feel it beneath his feet, in order to renew his strength. It is a general sentiment that on the rational and scientific culture of the soil depend to-day the existence and power of nations."

The Revenue system in Madras as in Bombay is mainly responsible for the hand to mouth existence of the cultivator. The late Famine Commission

revealed the fact that in the Bombay Presidency one-fifth of the cultivators had lost possession of their lands. It is only about a fifth that are free from debt, and all the rest are more or less involved in debt. The Commissioners say as to the Deccan "whether the assessment be moderate or full we have no doubt that it cannot be collected in short years without forcing the ryots into debt." The basic principles of the Bombay Revenue system did not meet with the approval of the Commissioners.

It is further evident from the enquiry of the Famine Commission that the staying power of the agriculturists has reached the vanishing point and prompt steps should be taken for the alleviation of their lot. The Commissioners rightly observed that the promoters of the land revenue system looked for the capitalist cultivator and they found the Sowcar's serf.

In a considerable portion of India, Government deals directly with the cultivators and no rights intervene between them and Government. Government responsibility is therefore the greater to help them to a rational and scientific culture of the soil. What our Government spends for the promotion of agriculture and the enlightenment of the agricultural community is precious little, notwithstanding the fact that out of the 44 crores of rupees, the revenue of British India, so much as 30 crores represents revenue derived from the land.

For the promotion of agriculture the Italian Government spends annually £ 3,20,000 or 3 pence per inhabitant. France, Switzerland and Denmark spend 12 pence per head on this account. This expenditure is incurred besides contributions by local authorities, voluntary subscriptions and school fees. If the Government of India is to spend under this head as much as the Italian Government does the expenditure ought to be 562½ lakhs of rupees.

Notwithstanding the many striking points of resemblance in the land tenures and agricultural condition of India and Italy the aspect of affairs in the latter country has changed in a wonderfully short time by the State aid and free education to the cultivating classes, and adoption of methods of promoting agriculture suitable to the country from which our Government might receive valuable lessons.

K. PRERAJU.

THE AGE OF KALIDASA.

VALMEKIE, Vyasa and Kalidasa are the history of ancient India, its sole and sufficient history. They are types and exponents of three periods in the development of the human soul, types and exponents also of the three great powers which dispute and clash in the imperfect and half-formed temperament and harmonize in the formed and perfect. For, their works are pictures at once minute and grandiose of the three ages of our Aryan civilisation of which the first was predominately moral, the second predominately intellectual, the third predominately material. The fourth power of the soul, spiritual, which can alone govern and harmonise the others by fusion with them, had not, though it pervaded and powerfully influenced each successive development, any separate age of predominance, did not like the others possess the whole race as with an obsession. It is because, cojoining in themselves the highest and most varied poetical gifts they at the same time represent and mirror their age and humanity by their interpretative largeness and power that our three chief poets hold their supreme place and bear comparison with the greatest world names, with Homer, Shakespeare and Dante.

It has been said, truly, that the Ramayan represents an ideal society and assumed, illogically, that it must therefore represent an imaginary one. The argument ignores the alternative of a real society idealised. No poet could evolve out of his own imagination a picture at once so colossal, so minute and so consistent in every detail. No number of poets could do it without stumbling into fatal incompatibilities either of fact or of view, such as we find defacing the Mahabharata. This is not the place to discuss the question of Valmekie's age and authorship. This much, however, may be said that after excluding the Uttarakanda, which is later work, and some amount of interpolation, for the most part easy enough to detect, and reform-

ing the text which is not unfrequently in a state of truly shocking confusion, the Ramayan remains on the face of it the work of a single mighty and embracing mind. According to the balance of probability the writer preceded even the original draft of Vyasa's epic and lived before the age of Krishna and the men of the Mahabharata. The nature of the poem and much of its subject matter justify, farther, the conclusion that Valmekie wrote in a political and social atmosphere much resembling that which surrounded Vyasa. He lived, that is to say, in an age of approaching if not present disorder and turmoil of great revolutions and unbridled aristocratic violence, when the governing chivalry, the Kshatriya caste, in its pride of strength was asserting its own code of morals as the one rule of conduct. We may note the plain assertion of this stand point by Jarasundha in the Mahabharata and Valmekie's emphatic and repeated protest against it through the mouth of Rama. This ethical code was like all aristocratic codes of conduct full of high chivalry and the spirit of noblest oblige, but a little loose in sexual morality on the masculine side and indulgent to violence and the strong hand. To the pure and delicate moral temperament of Valmekie, imaginative, sensitive, enthusiastic, shot through with rays of visionary idealism and ethereal light, this looseness and violence were shocking and abhorrent. He could sympathise with them, as he sympathised with all that was wild and evil and anarchic, with the imaginative and poetical side of his nature, because he was an universal creative mind driven by his art-sense to penetrate, feel and re-embody all that the world contained; but to his intellect and peculiar emotional temperament they were distasteful. He took refuge therefore in a past age of national greatness and virtue, distant enough to be idealised, but near enough to have left sufficient materials for a great picture of civilization which would serve his purpose—an age, it is important to note, of grandiose imperial equipoise; such as must have existed in some form

at least since a persistent tradition of it runs through Sanskrit literature. In the frame work of this imperial age his puissant imagination created a marvellous picture of the human world as it might be if the actual and existing forms and material of society were used to the best and purest advantage, and an equally marvellous picture of another non-human world in which aristocratic violence, strength, self-will, lust and pride ruled supreme and idealised or rather colossalised; brought these two worlds into warlike collision by the hostile meeting of their champions and utmost evolutions of their peculiar character-types, Rama and Ravana; and so created the Ramayan, the grandest and most paradoxical poem in the world, which becomes unmatchably sublime by disdaining all consistent pursuit of sublimity, supremely artistic by putting aside all the conventional limitations of art, magnificently dramatic by disregarding all dramatic illusion, and uniquely epic by handling the least as well as the most epic material. Not all perhaps can enter at once into the spirit of this masterpiece; but those who have once done so, will never admit any poem in the world as its superior.

My point here, however, is that it gives us the picture of an entirely moralised civilisation, containing indeed vast material development and immense intellectual power but both moralised, subordinated to the needs of purity of temperament and delicate ideality of action. Valmekie's mind seems nowhere to be familiarised with the stern intellectual gospel of *nishkama dharma*, that morality of disinterested passionless activity, promulgated by Krishna of Dwarica and formulated by Krishna of the Island, which is one great keynote of the Mahabharata. Had he known, it I doubt whether the strong leaven of sentimentalism and femininity in his nature would not have rejected it; such temperaments when they admire strength, admire it manifested and forceful rather than self-contained. Valmekie's characters act from emotional or imaginative enthusiasm, no

from intellectual conviction; an enthusiasm of morality actuates Rama, an enthusiasm of immorality tyrannises over Ravana. Like all mainly moral temperaments, he instinctively insisted on one old established code of morals being universally observed as the only basis of ethical stability, avoided casuistic developments and distasted innovators in metaphysical thought as by their persistent and searching questions dangerous to the established bases of morality, especially to its wholesome ordinarieness and everydayness. Valmekie, therefore, the father of our secular poetry, stands for that early and finely moral civilisation which was the true heroic age of the Hindu spirit.

Vyasa, following Valmekie, stood still farther on into the era of aristocratic turbulence and disorder. If there is any kernel of truth in the legends about him, he must have contributed powerfully to the establishment of those imperial forms of government and society which Valmekie had idealised. It is certain that he celebrated and approved the policy of a great aristocratic statesman who aimed at the subjection of his order to the rule of a central imperial power which should typify its best tendencies and control or expel its worst. But while Valmekie was a soul out of harmony with its surroundings and looking back to an ideal past, Vyasa was a man of his time, profoundly in sympathy with it, full of its tendencies, hopeful of its results and looking forward to an ideal future. The one was a conservative imperialist advocating return to a better but dead model, the other a liberal imperialist looking forward to a better but unborn model. Vyasa accordingly does not revolt from the aristocratic code of morality; it harmonises with his own proud and strong spirit and he accepts it as a basis for conduct, but purified and transfigured by the illuminating idea of the *nish-kama dharma*.

But above all intellectuality is his grand note. He is profoundly interested in ideas, in metaphysics, in ethical problems; he subjects morality

to casuistic tests from which the more delicate moral tone of Valmekie's spirit shrank; he boldly erects above ordinary ethics a higher principle of conduct having its springs in intellect and strong character; he treats government and society from the standpoint of a practical and discerning statesmanlike mind, idealising solely for the sake of a standard. He touches in fact all subjects, and whatever he touches, he makes fruitful and interesting by originality, penetration and a sane and bold vision. In all this he is the son of the civilisation he has mirrored to us, a civilisation in which both morality and material development are powerfully intellectualised. Nothing is more remarkable in all the characters of the Mahabharata than this puissant intellectualism; every action of theirs seems to be impelled by an immense driving force of mind solidifying in character and therefore conceived and outlined as in stone. This orgiastic force of the intellect is at least as noticeable as the impulse of moral or immoral enthusiasm behind each great action of the Ramayan. Throughout the poem the victorious and manifold mental activity of the age is prominent and gives its character to its civilisation. There is far more of thought in action than in the Ramayan, far less of thought in repose: the one pictures a time of gigantic ferment and disturbance; the other, as far as humanity is concerned, an age of equipoise, order and tranquillity.

Many centuries after Vyasa, perhaps a thousand years or even more, came the third great embodiment of the national consciousness, Kalidasa. Far more had happened between his own time and Vyasa's than between Vyasa's and Valmekie's. He came when the demonic orgy of character and intellect had worked itself out and ended in producing at once its culmination and reaction in Buddhism. There was everywhere noticeable a petrifying of the national temperament, visible to us in the tendency to codification; philosophy was being codified, morals were being codified; knowledge of any and every sort was being codified: it was on one side of its nature

an age of scholars, legists, dialecticians, philosophical formalisers. On the other side the enthusiasm and poetry of the nation was pouring itself into things material, into the life of the senses, into the pride of life and beauty. The arts of painting, architecture, song, dance, drama, gardening, jewellery, all that can administer to the wants of great and luxurious capitals, received a grand impetus which brought them to their highest technical perfection. That this impetus came from Greek sources or from the Buddhists seems hardly borne out: the latter may rather have shared in the general tendencies of the time than originated them, and the Greek theory gives us a maximum of conclusions with a minimum of facts. I do not think, indeed, it can be maintained that this period, call it classical or material or what one will, was marked off from its predecessor by any clear division: such a partition would be contrary to the law of human development. Almost all the concrete features of the age may be found as separate facts in ancient India: codes existed from old time; art and drama were of fairly ancient origin, to whatever date we may assign their development; physical yoga processes existed almost from the first, and the material development portrayed in the *Ramayan* and *Mahabharata* is hardly less splendid than that of which the *Raghuvamsa* is so brilliant a picture. But whereas, before, these were subordinated to more lofty ideals, now they prevailed and became supreme, occupying the best energies of the race and stamping themselves on its life and consciousness. In obedience to this impulse the centuries between the rise of Buddhism and the advent of Sankaracharya became, though not agnostic and sceptical, for they rejected violently the doctrines of Charvak, yet profoundly scientific and materialistic even in their spiritualism. It was therefore the great age of formalised metaphysics, science, law, art and the sensuous luxury which accompanies art.

Nearer the beginning than the end of this period when India was systematising her philosophies and

developing her arts and sciences, turning from Upanishad to Purana, from the high rarefied peaks of Vedanta and Sankhya with their inspiring sublimities and bracing keenness to the physical methods of Yoga and the dry intellectualism of the Nyaya or else to the warm sensuous humanism of emotional religion,—before its full tendencies had asserted themselves, in some spheres before it had taken the steps its attitude portended, Kalidasa, arose in Ujjayini and gathered up in himself its present tendencies while he portended many of its future developments. He himself seems to have been a man gifted with all the learning of his age, rich, aristocratic, moving wholly in high society, familiar with and fond of life in the most luxurious metropolis of his time, passionately attached to the arts, acquainted with the sciences, deep in law and learning, versed in the formalised philosophies. He has some notable resemblances to Shakespeare; among others his business was, like Shakespeare's, to sum up the immediate past in the terms of the present: at the same time he occasionally informed the present with hints of the future. Like Shakespeare also he seems not to have cared deeply for religion. In creed he was a Vedantist and in ceremony a Sivaite, but he seems rather to have accepted these as the orthodox forms of his time and country, recommended to him by his intellectual preference and æsthetic affinities, than to have satisfied with them any profound religious want. In morals also he accepted and glorified the set and scientifically elaborate ethics of the codes but seems himself to have been destitute of the finer elements of morality. We need not accept any of the ribald and witty legends with which the Hindu decadence surrounded his name; but no unbiassed student of Kalidasa's poetry can claim for him either moral fervour or moral strictness. His writings show indeed a keen appreciation of high ideal and lofty thought, but the appreciation is æsthetic in its nature: he elaborates and seeks to bring out the effectiveness of these on the imaginative sense of the noble and grandiose, applying

to the things of the mind and soul the same sensuous standard as to the things of sense themselves. He has also the natural high aristocratic feeling for all that is proud and great and vigorous, and so far as he has it, he has exaltation and sublimity; but æsthetic grace and beauty and symmetry sphere in the sublime and prevent it from standing out with the bareness and boldness which is the sublime's natural presentation. His poetry has, therefore, never been, like the poetry of Valmèkie and Vyasa, a great dynamic force for moulding heroic character or noble or profound temperament. In all this he represented the highly material civilisation to which he belonged.

Yet some dynamic force a poet must have, some general human inspiration of which he is the supreme exponent; or else he cannot rank with the highest. Kalidasa is the great, the supreme poet of the senses, of æsthetic beauty, of sensuous emotion. His main achievement is to have taken every poetic element, all great poetical forms, and subdued them to a harmony of artistic perfection set in the key of sensuous beauty. In continuous gift of seizing an object and creating it to the eye he has no rival in literature. A strong visualising faculty such as the greatest poets have in their most inspired descriptive moments, was with Kalidasa an abiding and unfailing power, and the concrete presentation which this definiteness of vision demanded, suffused with an intimate and sovran feeling for all sensuous beauty of colour and form, constitutes the characteristic Kalidasian manner. He is besides a consummate artist, profound in conception and suave in execution, a master of sound and language who has moulded for himself out of the infinite possibilities of the Sanscrit tongue a verse and diction which are absolutely the grandest, most puissant and most full-voiced of any human speech, a language of the Gods. The note struck by Kalidasa when he built Sanscrit into that palace of noble sound, is the note which meets us throughout all this last great millennium of Aryan literature. Its cha-

racteristic features are brevity, gravity and majesty, a noble harmony of verse, a strong and lucid beauty of chiselled prose, above all an epic precision of phrase, weighty, sparing and yet full of colour and sweetness. Moreover it is admirably flexible, suiting itself to all forms from the epic to the lyric, but most triumphantly to the two greatest, the epic and the drama. In his epic style Kalidasa adds to these permanent features a more than Miltonic fullness and grandiose pitch of sound and expression, in his dramatic an extraordinary grace and suavity which makes it adaptable to conversation and the expression of dramatic shade and subtly blended emotion.

With these supreme gifts Kalidasa had the advantage of being born into an age with which he was in temperamental sympathy and a civilisation which lent itself naturally to his peculiar descriptive genius. It was an aristocratic civilisation, as indeed were those which had preceded it, but it far more nearly resembled the aristocratic civilisation of Europe by its material luxury, its æsthetic tastes, its polite culture, its keen wordly wisdom and its excessive appreciation of wit and learning. Religious and ethical thought and sentiment were cultivated much as in France under Louis XIV, more in piety and profession than as swaying the conduct; they pleased the intellect or else touched the sentiment but did not govern the soul. It was bad taste to be irreligious, but it was not bad taste to be sensual or even in some respects immoral. The splendid and luxurious courts of this period supported the orthodox religion and morals out of convention, conservatism, the feeling for established order and the inherited tastes and prejudices of centuries, not because they fostered any deep religious or ethical sentiment. Yet they applauded high moral ideas if presented to them in cultured and sensuous poetry much in the same spirit that they applauded voluptuous description similarly presented. The ideals of morality were much lower than of old; drinking was openly recognised and indulged in by

both sexes ; purity of life was less valued than in any other period of our civilisation. Yet the unconquerable monogamous instinct of the high-class Hindu woman seems to have prevented promiscuous vice and the disorganisation of the home which was the result of a similar state of society in ancient Rome, in Italy of the Renaissance, in France under the Bourbons and in England under the later Stuarts. The old spiritual tendencies were also rather latent than dead, the mighty pristine ideals still existed in theory, they are outlined with extraordinary grandeur by Kalidasa,—nor had they yet been weakened and disheroized. It was as has been said of the century of Louis XIV, an age of great sins and great repentances ; for the inherent spirituality of the Hindu nature finally revolted against that splendid and unsatisfying life of the senses. But of this latter phase Bhartrihari and not Kalidasa is the poet. The earlier writer seems to have lived in the full heyday of the material age before the setting in of the sickness and dissatisfaction and disillusionment which invariably follow a long outburst of materialism.

The flourishing of the plastic arts had prepared surroundings of great external beauty for Kalidasa's poetic work to move in. The appreciation of beauty in nature, of the grandeur of mountain and forest, the loveliness of lakes and rivers, the charm of bird and beast life had become a part of contemporary culture. These and the sensitive appreciation of trees and plants and hills as living things, the sentimental feeling of brotherhood with animals which had influenced and been encouraged by Buddhism, the romantic mythological world still farther romanticised by Kalidasa's warm humanism and fine poetic sensibility, gave him exquisite grace and grandeur of background and scenic variety. The delight of the eye, the delight of the ear, smell, palate, touch, the satisfaction of the imagination and taste are the texture of his poetical creation, and into this he has worked the most beautiful flowers of emotion and

sensuous ideality. The scenery of his work is an universal paradise of beautiful things. All therein obeys one law of earthly grace ; morality is aestheticised, intellect suffused and governed with the sense of beauty. And yet this poetry does not swim in languor, does not dissolve itself in sensuous weakness ; it is not heavy with its own dissoluteness, heavy of curl and heavy of eyelid, cloyed by its own sweets, as the poetry of the senses usually is : Kalidasa is saved from this by the elasticity of his style, his aim at burdened precision and energy of phrase, his unsleeping artistic vigilance.

As in the Ramayan and Mahabharata we have an absorbing intellect impulse or a dynamic force of moral or immoral excitement driving the characters, so we have in Kalidasa an orgiastic sense impulse thrilling through speech and informing action. An imaginative pleasure in all shades of thought and of sentiment, a rich delight in their own emotions, a luxuriousness of ecstasy and grief, an entire abandonment to amorous impulse and rapture, a continual joy of life and seeking for beauty mark the period when India having for the time exhausted the possibilities of soul-experience attainable through the spirit and the imaginative reason, was now attempting to find out the utmost each sense could feel, probing and sounding the soul-possibilities in matter and seeking God through the senses. The emotional religion of the Vaishnava Puranas which takes as its type of the relation between the human soul and the Supreme the passion of a woman for her lover, was already developing. The corresponding development of Sivaism may not yet have established itself ; but on a higher philosophical plane the same idea works itself into Kalidasa's poetry. The Birth of the War-God is at once the Paradise Lost and the De Berum Natura of this age, its masterpiece and *magnum opus* on the epic level ; and the central idea of this great representative poem the marriage of Siva and Parvati, typifying undoubtedly the union of Purusha and Prakriti, the supreme soul and its material nature by which the world is created, but also and more

definitely typifying the soul's search for and attainment of God. The two most spiritual and philosophical conceptions possible to religious thought are thus worked out through the sex-idea, and the culmination is one of the most glowing, voluptuous and human pieces of erotic descriptions in literature. We have, therefore, the last stage of the Vaishnava conception in the later Puranas anticipated by Kalidasa; for as I have already suggested, while summing up in himself the tendencies of his time, he often anticipates their later developments. Such are the philosophic conceptions, such the religious imaginings of the mediæval sense-civilisation in India. Of that civilisation the season is the first immature self-expression, the House of Raghu the epic, the Cloud Messenger the descriptive elegy, Shacountala with her two sister love-plays the dramatic picture and the Birth of the War-God the grand religious and philosophical fable. Kalidasa, who typified so many sides and facets of it in his writings, stands for its representative man and genius, as was Vyasa of the intellectual civilisation and Valmekie of the moral.

It was the supreme misfortune of India that before she was able to complete the round of her experience and gather up the fruit of her long millenniums of search and travail by commencing a fourth and perfect age in which moral, intellectual and material development should be all equally perfected and all spiritualised, the inrush of barbarians broke in on her endless solitary agony of effort and beat her national life into fragments. We see the first preparatory and initial striving towards such an age in the renovating work of Shankaracharya, restoring intellect and spirituality to their pinnacle high above the emotions, proving matter out of existence; in the dramas of Bhavabhuti in which the emotions themselves were purified and exalted from the service of sense to the service of the soul, and even sensuousness was forced to share in the general exaltation and obey the summons of purity; and in the re-assertion in social life of sobriety and purity as ideals imperatively demanded by the

national conscience. But the work was interrupted before it had well begun; and India was left with only the dregs of the material age to piece out her existence. Yet even the little that was done, proved to be much; for it saved her from gradually petrifying and perishing as almost all the old civilisations, Assyria, Egypt, Greece, Rome, petrified, and perished, as the material civilisation of Europe, unless spiritualised, must before long petrify and perish. That there is still a vitality, that our country yet nourishes the seeds of re-birth and renewal, we owe to Shankaracharya and the men who prepared the way for him. Will she yet arise, new-combine her past and continue the great dream where she left it off, shaking off on the one hand the soils and filth that have grown on her in her period of downfall and futile struggle, and reasserting on the other her peculiar individuality and national type against the callow civilisation of the West with its dogmatic and intolerant knowledge, its still more dogmatic and intolerant ignorance, its deification of selfishness, and force, its violence and its ungoverned Titanism. In doing so lies her one chance of salvation.

AUROBIND GHOSH.

BASAVA, THE LINGAYAT REFORMER.

TOWARDS the close of the Brahmanic revolt against the once all-supreme Buddhism an apparently insignificant event occurred in the obscure and quiet village of Hingulesvara in the Southern Mahratta country. It did not attract much public notice at the time but all the same it heralded the birth of a great religious reformer who was destined to play an important part in the history of India. An orthodox Brahman couple of the village had long prayed at the local temple of Siva for a son, and the awe-inspiring but beneficent deity at last heard the prayer of his pious devotees. Nandi, the bull of Siva, was commissioned to go down on earth on the sacred mission of the resuscitation of the decaying Saiva religion and thus was born, Basava, the founder of the Lingayat Religion.

Intended for the priesthood he underwent his period of probation under his father, who seems to have been well versed in the usual sastric lore and tradition. The petulant youth was impatient of the unmeaning ceremonies of the Brahmanical hierarchy and early exhibited signs of the rebellious spirit that characterised the man all through his adventurous life. A stripling of eight or ten he objected to the customary investiture of the sacred thread because it involved the adoration of the eastern orb after the Vedic presumption. A master of the sacred Saiva scriptures he declared himself a special worshipper of Siva and boldly asserted that he had come to destroy the distinctions of caste. No Pharisee, he stood firm to his convictions. His singular theories and novel practices, meanwhile, attracted the attention of the Brahmans and persecution of a petty character closely followed at his heels. Aware, however, of the turn that events may take in his own native village he designed a flight. Not far was the capital of the Kalachurya King, Bijjala, who was himself a Jain by religion and whose Prime minister, Baladeva was the rising reformer's maternal uncle. Away he went to him followed by his sister, Padmavathi, a lass as beautiful as the lotus flower, who was passionately attached to him. The news of his stern, refusal, his practical wisdom and his singular piety had meanwhile created a lasting impression on his great uncle with the consequence that he gave him his daughter, Gangamba, in marriage and secured to him a quiet and happy resting place in his palatial abode. But the divinely discontented spirit could not rest in peace. The more Basava saw of the opposite theories and tenets of the Brahmanes and Jainist, the more did he become conscious of his divine message. The greater his observant eye met the differences that divided caste from caste, family from family, and individual from individual, the more did he become convinced of the cruelty of caste. His soul was exceeding sorrowful unto death. The miseries of down-trodden humanity took firm hold of his

imagination. Could he not induce men to give up faith in dead effete superstitions which meant the surrender of reason to blind belief? Could he not impress upon them the tyranny of a superior priestcraft? Could he not prove to them the equality of sexes? Could he not make them get over barren differences? Could he not persuade them to look upon each other as brethren born of the same eternal Father? Could he not make them realise that they were the children of the same living God? Could he not minimise the miseries of fallen humanity? Such were the problems that repeatedly presented themselves to him for solution. A state of mental frenzy like that required more the companionship of solitude than that of the surging populace of a capital city. Basava had arrived at the crisis of his life. The spirit was truly ready and the flesh was not weak. Even as the Great Enlightened had done before him Basava repaired to the undisturbed quiet of Sanganesvara and there lost himself in meditation. Barely had he formed the plan of his campaign than he was called to his mission by the death of his maternal uncle and father-in-law, the prime-minister of Bijjala. His stern resolution, his great abilities, and his inspiring piety had created a deep popular impression in his favour. The King himself had become a close relation of Basava. He had married the beautiful Padmavathi. That bond had been recently tightened by the birth of a son to the king. This was Chenna or the beautiful Basava, who was probably named after the illustrious reformer in recognition of the sister's zealous affection for him. The late minister's adherents and kith and kin also urged upon the king the advisability of calling in Basava for the vacant post. All hands thus pointing to him, the king earnestly solicited Basava's return to worldly life. Impelled by motives other than personal aggrandisement or fame he gladly accepted office and ere long, despite the dissents and doubts of high authorities entered upon the onerous duties of his life's work. His political status was only a means to the end

in his view and to this he addressed himself with zeal and enthusiasm.

Thus all circumstances favouring, he proclaimed his gospel to the world. He preached that there was one sole God without a second. He denounced the worship of other gods, goddesses and inferior beings. He declared that the adoration of cows and hawks and monkeys and serpents could not effect one's salvation. He said that the keeping of fasts and the making of feasts would not advance them one inch towards the kingdom of God. He taught that the performance of penances, the going on of pilgrimages, the using of rosaries and the sprinkling of holy water did not render them the fitter to approach the Almighty presence. He pronounced the inefficacy of the hoary Puranas and the hoarier Vedas. He strenuously advocated the doctrine of equality of men. He preached that all men are entitled to equal rights in all matters affecting their individual and social well being. He even strove hard to prove that in matters of reform example is better than precept. He declared that a Brahman and a Pariah were both children of the same God and as such no artificial distinctions ought to be maintained between them. He thus held that there was no caste but one—Humanity. His doctrine of the equality of men led him to a kindred doctrine, and it is not improbable that it was the fruitful result of the almost divine influence of his sister upon him. He proclaimed the equality of the sexes. Unlike his brother reformer, the Prophet of Arabia, Basava preached that women are possessed of souls, as immortal as those of men, and that they should be respected and permitted to act as spiritual teachers equally with men. Incivility to women, he construed as an insult offered to the God, whose image she wears and with whom she is one. The philosophical Mill himself would have wondered at the success that attended the reformer on this head of his programme. Even to this day the Lingayat Guru is oftentimes a female who initiates the young into the mysteries of

her revered teacher's religion by whispering the sacred manthra into their ears and

“Hanging a golden image about their necks

Put on with holy prayers”

as the immortal bard would have it. Perhaps his pleading the cause of the Hindu Widows must also be traced to the same source. He led a crusade against enforced widowhood. He advocated the remarriage of widows and forbade the wanton disfiguring of their heads.

The success of his teaching was seen in the numbers of converts that he began to count for his reformed religion. The novelty of his doctrines, entirely opposed as they were to every Brahminical principle, was perhaps not the only element responsible for his success. His unbounded sympathy for the poorer classes gained him not a few adherents. His intense personal attachment to his followers also helped him in the same direction. A story taken from the Purana will, perhaps, explain the point better. A follower of his kept a dancing girl, and as usual sent a slave for his allowance of rice to the house of Basava, where the messenger saw the wife of the latter, and on his return reported to the dancing girl the magnificence of her attire. The woman was filled with a longing for a similar dress, and the adherent having no other means of gratifying her repaired to Basava to beg of him his wife's garment. Basava immediately stripped his wife of all her dress and gave them all to the follower. Perhaps, the ordinary populace were more impressed by his miracles than by his teaching, profoundly divine as it appeared to the more religious folk. As in the case of Jesus of Nazareth even those who did not believe in him were impressed by these acts and sought to witness them. Miracles, as Mons. Renan has remarked, are the indispensable mark of the divine, and the sign of the prophetic vocation. In the opinion of the ordinary populace the performance of miracles and the accomplishment of prophecies are the only two proofs to establish one's supernatural mission. It was so with many a

religious reformer of old and so it was with Basava. He and his disciples, we are told in the Purana, worked many marvellous miracles, some of them strongly bringing to our minds the doings of the great and divine prophet of Nazareth. They converted grains of corn to pearls, discovered hidden treasures, fed multitudes, healed the sick and restored the dead to life.

But discontent was gathering head against him. His heterodoxy, his helping himself with the royal treasury for private charitable purposes, his partiality towards his co-religionists—even not punishing their highly criminal acts, such as murder—his intense hatred of the Jains, to whose religion the king and the greater portion of the subjects belonged, the fanatic tendencies of his disciples, like Ekanta Ramayya, and their wanton destruction of Jain Pagodas at the capital all roused popular indignation against the reformer. The king himself, though he had married Basava's sister, did not approve of the principles and conduct of his minister. He had not become an open convert to his religion to espouse his cause. His feelings of uneasiness and distrust were further fanned from time to time by a rival who coveted his post. The king in consequence attempted to repress the new religion but, went to extremes in his remedial measures. He put down the eyes of the devout adherents of Basava, which induced the latter and his disciples to leave Kalyan with imprecations on it to Sangameswara for good. The remaining followers of Basava intent on reprisals "announced to the people," as one of the traditionary accounts puts it, "that the fortunes of Bijjala had passed away, as indicated by portentous signs; and accordingly the crows crowed in the night; jackals howled by day; the sun was eclipsed, storms of wind and rain came on, the earth shook and darkness overspread the heavens." Then a number of them marched against the king and one of them killed the king in open court and then dancing put himself to death. "Then" continues the Purana, "arose dissension in the city and the people

fought amongst themselves, and horses with horses, and elephants with elephants, until agreeably to the curse denounced upon it by Basava and his disciples Kalyana was utterly destroyed." Probably Basava himself was not responsible for the foul deed, though he was suspected of complicity in it. The dead King's son sought vengeance and hunted down the reformer to Vrishahapura. Despair crept into the once undaunted soul and the ill-fated reformer, at last brought to bay, drowned himself in a well to avoid personal indignities and affronts not to speak of a cruel death that awaited his capture.

Such is the reward that the high-souled children of the world get for their arduous work amongst their fellow-creatures. Socrates of old had his cup of poison, Jesus of Nazareth bore his own cross, and Basava, the Indian Reformer, could only find eternal rest in the bosom of a ruined well! But his death signalled the future success of the new religion. It put new life and vigour into his devout followers. It is not known whether as the result of their early missionary zeal or as the indirect result of slow absorption it became within half-a-century from his death the prevailing religion of the country from Goa to Sholapur and from Balehonnur to Sivagunga. It was also, according to distinguished authorities, the State religion of Mysore till the beginning of the seventeenth and of the Nayaks of Keladi and Bednur and of the Coorg Rajahs till their deposition. Even now it is embraced by large numbers in the presidencies of Bombay and Madras and in the Feudatory States of Mysore, Kolhapur and the Nizam's Dominions. But the greatness of a religion does not consist wholly in the numerical strength of its followers. It more consists in the high moral tone that it imparts to its converts. Paradoxical as it may appear Basava, bitterly opposed as he was to Brahmanical concepts and institutions, hastened what has been so well described by Sir Alfred Lyall as the gradual Brahmanisation of the Non-Aryans of India. Himself a Brahman, Basava made perfect sobriety and total

abstinence from animal food the chief corner stones of his social polity. Even now in whatever else they may differ, widely diffused and consequently surrounded by different environments as they are, all Lingayats agree in being *strict* vegetarians and *stricter* tee-totalers. These were the only points in which Basava agreed with his Brahman opponents and in the inculcation of these perhaps, he bestowed the greatest blessings upon a large portion of the Hindu community and established his claims upon humanity as one of its great benefactors.

If Basava was eminently successful in this part of his programme he was less so in another portion of it. Early in life he had declared that he had come to destroy the distinctions of caste and doubtless in later times had vehemently preached against them. But the work was too great for him and his harrowing end tolled the knell of that part of his mission. It is, the old, old tale told over again. What the founder of Buddhism had, under more favourable circumstances, attempted and failed in, it was not possible for Basava to attain during the middle of the twelfth century after Christ when Brahmanism had, with redoubled vigour, asserted its supremacy against its old opponent, Buddhism. Both Buddha and Basava were, as all reformers are bound to be, in advance of their times. The heroic Buddha failed because he endeavoured to carry out the doctrine of the Upanishads to its last consequences, and as the late lamented Oxford Professor put it, that is important, employed it as the foundation of a new social system. Basava, though he came later more than twelve centuries, repeated the attempt and, strange to say, shared its fate. The principal reason of their failure seems to have been identical. Both of them failed to appreciate the true origin and nature of caste. A philosophic tenet they endeavoured to convert into a practical precept. They saw not that caste was not any more an invention of the Brahman than the philosophical principle on which

its abolition was based was that of the Non-Brahman. In their feeling for humanity they failed to diagnose the true disease from which it was most suffering. They perceived not the ethnic basis of caste, and therein their range of human vision was not sufficiently broad. At the same time they failed to see that the ideas of the few had not become the ideas of the many, and that the learning of the few had not become the lesson of the many. The result in each case was what it has been. The religion of Buddha was exterminated from the land of its birth and the religion of Basava has crystallised itself into another religious sect in this land of religions. Is it not an irony of fate that the man who fought hard against what he thought the cruelty of caste should himself leave behind him as a living monument of his zealous work a caste that retains none of its pristine vigour, but the barren hatred of surrounding Brahmans which more often ends in civil disturbances and calls in executive interference for the preservation of the public peace? But, perhaps, there is more truth than men are aware of in the old *dictum* of Aristotle, peculiarly applicable to India under existing conditions.—that in it every distinction creates a division.

C. HAYAVADANA RAO.

[In the preparation of this article besides the Vernacular biographies of Basava the following works have been consulted: Prof. Wilson's *Essay on "Jangams."* Works I or Asiatic Researches Vol. XVII; C. P. Brown's *Essay in M. J. L. S. XI*; *Journal of the Bombay Branch Royal Asiatic Society*, VIII; Dr. Fleet's article in the *Epigraphia Indica* Vol. V; L. Rice's *Mysore Gazetteer I*; and Rev. Taylor's *Oriental MSS. I*.

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PEACE AT LAST.

WITH the exception of Mr. Kruger, Dr. Leyds, and perhaps a few others, all the world hailed with unbounded joy and relief the news that the war in South Africa had been brought to a close. The result could never have been seriously doubted by anybody, although British checks and disasters, magnified by anxiety and exaggerated by jealousy, threw the public mind every now and then into a state of acute suspense. The Press censorship in the seat of war, stinting intelligence and distorting the little that was vouchsafed, added a provoking, if necessary, torment to the newspaper reader who was dumbfounded at the suppressions of truth, the suggestions of falsehood, and other offences against fact that made up the daily telegrams. Humanity, if not exactly 'staggered,' has been rendered sick with the spectacle of a small nation rushing to its doom with genuine but ill fated enthusiasm. Great indeed must be the gain to civilisation that deserves to be purchased at such tremendous cost as has been paid by the belligerents during this fearful struggle. The war began technically on the 11th October 1899, on which day the period fixed in the Boer 'ultimatum' for the withdrawal of British troops from South Africa expired; so that when the terms of surrender were agreed to at Pretoria on the 31st May this year, it had lasted for two years, seven months and twenty days. The losses on the Boer side cannot be estimated, but their magnitude can be guessed from the fact that the number of prisoners alone, now held in various parts of the Empire, is nearly 45,000. The British losses have been reckoned up more or less accurately. By death in action and disease the army has suffered a reduction of 28,000, while 74,000 men have been invalided. The loss in money has been computed by Mr. Chamberlain himself at £ 228 millions. Such a drain could not but be

felt by the Empire with all its resources, and it speaks much for the patience and patriotism of the taxpayer that he has so long borne the burden without clamouring for peace. And his reward has come. The Republics have become part of the British Empire, and the whole of South Africa may henceforth unitedly enter upon a career of progress and prosperity which always mark the advance of the Union Jack. The prestige of the United Kingdom has been vindicated, and the term British subject has had its full import established in the most impressive manner possible.

The issue of the war has made it clear that the extension of the Empire's territory so far has not been much in advance of that of its resources, and that a nation that can send forth to South Africa and maintain there under the most adverse conditions an army of nearly 500,000, cannot lack the ability to defend any corner of its possessions. At the same time any one who has followed with interest the alternating phases of the contest must have been struck with the large part that the UNFORESEEN played in the bloody drama. The limitations set by nature to the providence and sagacity of statesmen stood revealed with glaring vividness, and many episodes of this war might be cited in support of the proposition that British statesmanship cannot sustain the burden of a larger Empire. "Somehow we have put the thing through" is good enough consolation to the grumbling taxpayer, but it is not the triumph of statesmanship. The thing must not be put through *anyhow*; it must be put through with the least possible damage.

Omitting the smaller scandals connected with remounts, the War Office was an object of incessant attack, and its ignorance, unpreparedness, and obstructiveness afforded ample scope for ridicule. On the field British scouting was at first very inefficient, while the army frequently found itself outgeneralled. In fact some fresh lessons in warfare had to be learned, and at present great changes are under contemplation in the system of military training. This is not all. The frequent failure of

English commanding officers in the first months of the war drew attention to the training they had undergone in youth, and the subject of reform in education, now so warmly canvassed, received its great impetus from that cause.

Another thing that the war first made apparent was the great ill-will of the people of the continent to the English. Though the Governments preserved a strict neutrality, the press and the people in most countries of Europe were in sympathy with the Boers. Doubtless this attitude was largely the result of jealousy. Still it cannot be doubted that the general feeling was that justice lay on the side of the late Republics. The question of justice is one of international morality and international law, and can be decided only by the future historian. However he may apportion the blame, the ordinary man, unused to the conventions of diplomacy and the restraints of political action, cannot but lament the technical pleas that excluded arbitration or the fatuous self-righteousness that allowed the negotiations before the outbreak of hostilities to be conducted on the British side by one who certainly did not enjoy the confidence of the other party and was probably committed to a certain course of action. It is an eloquent testimony to the impotence of religion that the Church should have been carried away by the excitement; and the fact that continental nations sympathised with, but did not help, the Republican farmers, proves that chivalry finds no place among the springs of national movements. This non-interference, however, is not to be deplored; for otherwise the war would have taken far larger proportions and caused infinitely greater harm to humanity.

The excitement of the war has brought to light the slender hold that great ideas which are the boasted triumphs of civilisation have on the minds of the people at large. Liberty of speech is one of the corner-stones of present day polity; each citizen commonly thinks that he enjoys it, and what is more, that he allows others to enjoy it

freely. But this perfect tolerance of opinion was not visible in the angry controversies that have divided the great political parties in England. The Imperialists, who certainly have not the excuse of being in the minority, practically silenced adverse criticism by applying the terms 'traitor' and 'pro-Boer' to those who ventured upon it. None but a daring few raised their voice, while the Irish members by their excesses drew popular indignation upon liberal opinions. But though unable to prevent war the Liberal party has done useful work. Divided against itself, it has yet by watchful criticism improved the system of concentration camps and block-houses and moderated the demands of the Ministry upon the suppliant Boers.

One just cause of pride and gratulation to England is the great eagerness shown by the Colonies to help the Empire in need. Volunteers and Regulars came forward in abundance and risked their lives in the Imperial cause. India has loyally borne her share of the Empire's burden and shed her blood in the war waged to secure to British subjects their birthright. It is with confidence therefore that she expects the statesmen of England to secure to Indians in all parts of the Empire the rights and privileges enjoyed by other British subjects.

But what about the nation that has lost its independence? The Boers have fought nobly, and it was not merely the soothing generosity of the conqueror that made Lord Kitchener say that, were he a Boer, he would be proud to have fought as they had fought. The sentiment will be echoed wherever bravery is admired and patriotism honoured. The rude farmers of the South African veldt have carved themselves a niche in the temple of fame, and will live in history as a people who knew how to make homes and fight for them. Politically, they can never hope to regain ascendancy, for even when full civic equality is accorded, they will be much in the minority. Socially, it may be expected that, as soon as the memory of recent events sub

sides, the two races will freely intermarry and beget the future Africander nation. The two civilisations are not so utterly disparate, nor, if we may believe Miss Olive Schreiner, is there such a natural repulsion between the peoples as may keep them in strict isolation from each other. It augurs well for the future that already under the good example of Viscount Kitchener the leaders of the rival races have learned to respect and fraternize with each other.

"THE HINDU IDEA AND CEREMONY OF CORONATION."

In connection with Prof. Rangachariar's article on this subject which we published in our last issue the accounts given below of the Coronation of King Yudhishtra and the Consecration of Rama may be read with interest.—Ed.I.R

CORONATION OF KING YUDHISTRA.

It may be remembered that King Yudhishtra made a triumphal entry into Hastinapur, the modern Delhi from the field of Kurukshetra.

Vaisampayana said,—“The royal son of Kunti, freed from grief and the fever of his heart, took his seat, with face eastwards, on an excellent seat made of gold. On another seat, beautiful and blazing and made of gold, sat, with face directed towards him, those two chastisers of foes, Satyaki and Vasudeva. Placing the king in their midst, on his two sides sat Bhima and Arjuna upon two beautiful seats adorned with gems. Upon a white throne of ivory, decked with gold, sat Pritha with Sahadeva and Nakula Sudharman (the priest of the Kauravas), and Vidura, and Dhaumya, and the Kuru king Dhritarashtra, each sat separately on separate seats that blazed with the effulgence of fire. Yuyutsu and Sanjaya and Gandhar of great fame, all sat down where king, Dhritarashtra had taken his seat. The righteous old king, seated there, touched the beautiful white flowers, *Swastika*, vessels full of diverse articles, earth, gold, silver, and gems, (that were placed before him). Then all the subjects headed by the priest, came to see king Yudhishthira, bringing with them diverse kinds of auspicious articles. Then earth, and gold, and many kinds of gems, and all things in profusion that were necessary for the performance of the coronation rite, were brought there. There were golden jars full to the brim (with water), and those made of copper and silver and earth, and flowers, and fried paddy, and *Kusa* grass, and cow's milk, and (sacificial) fuel consisting of the wood of *Samī* (*Accacia Suma*) *Pippa* (*Piper longum*) and *Palasa* (*Butea frondosa*), and honey and clarified butter and (sacificial) ladles made of *Udumbara* (*Ficus glomerata*), and conches adorned with gold. Then the priest Dhaumya, at the request of Krishna, constructed according to rule, an altar gradually inclining towards the east and the north. Causing the high-

souled Yudhishthira then, with Krishna and the daughter of Drupada, to be seated upon a handsome seat, called *Sarvatoṭṭhara*, with firm feet and covered with tiger-skin and blazing with effulgence, began to pour libations of clarified butter (upon the sacrificial fire) with proper *mantras*. Then he of Dasarha's race rising from his seat, took up the sanctified conch, poured the water it contained upon the head of that lord of Earth, viz., Yudhishthira the son of Kunti. The royal sage Dhritrashtra and all the subjects also did the same at the request of Krishna. The son of Pandu then, with his brothers, thus bathed with the sanctified water of the conch, looked exceedingly beautiful. Then *Panavas* and *Anakas* and drums were beat. King Yudhishthira, the Just, duly accepted the gifts made unto him by the subjects. Always giving away presents in profusion in all his sacrifices, the king honoured his subjects in return. He gave a thousand *nishkas* unto the Brahmanas that uttered (special) benedictions on him. All of them had studied the Vedas and were endued with wisdom and good behaviour. Gratified (with gifts), the Brahmanas, O king, wished him prosperity and victory, and with voice melodious like that of swans, uttered his praises, saying, ‘O Yudhishthira of mighty arms, by good luck, O son of Pandu, victory has been thine! By good luck, O thou of great splendour, thou hast recovered thy position through prowess! By good luck, the wielder of *Gandira* and Bhimasena, and thyself O king, and the two sons of Madri, are all well having slain your foes and escaped with life from this battle, so destructive of heroes! Do thou, O Bharata, attend without delay to those acts that should next be done!’ Thus adored by those pious men, king Yudhishthira, the Just, with his friends, became installed on the throne of a large kingdom, O Bharata!”

RAMA'S CONSECRATION.

(FROM MR GRIFFITH'S RAMAYANA.)

Then, reverent hand to hand applied,
Thus Bharata to his brother cried:
‘Now grant what all thy subjects ask:
Begin, O King, thy royal task.
Now let our longing eyes behold
The glorious rite ordained of old,
And on the new found monarch's head
Let consecrating drops be shed.’
He ceased: victorious Rama bent
His head in token of assent.
He sat, and tongsors trimmed with care
His tangles of neglected hair,
Then, duly bathed, the hero shone
With all his splendid raiment on.
And Sita with the matrons' aid
Her limbs in shining robes arrayed,
Sumantra then, the charioteer,
Drew, ordered by Satrugna near,
And stayed within the hermit grove,
The chariot and the steeds he drove.
Therein Sugriva's consorts, graced
With gems, and Rama's queen were placed,
All fain Ayodhya to behold:
And swift away the chariot rolled.
Like Indra Lord of Thousand Eyes,
Drawn by fleet lions through the skies,
Thus radiant in his glory showed
King Rama as he homeward rode,
In power and might unparalleled,
The reins the hand of Bharata held:

Above the peerless victor's head
 The snow-white shade Satrugna spread,
 And Lakshman's ever-ready hand
 His forehead with a chourie fanned.
 Vibhishan close to Lakshman's side
 Sharing his task a chourie plied.
 Sugriva on Satturjay came,
 An elephant of hugest frame :
 Nine thousand others bore, behind,
 The chieftains of the Vanar kind
 All gay, in forms of human mould,
 With rich attire and gems and gold.
 Thus borne along in royal state
 King Rama reached Ayodhya's gate
 With merry noise of shells and drums,
 And joyful shouts, He comes, he comes,
 A Brahman host with solemn tread,
 And kine the long procession led,
 And happy maids in ordered bands,
 Threw grain and gold with liberal hands.
 Neath gorgeous flags that waved in rows
 On towers and roofs and porticoes,
 Mid merry crowds who sang and cheered
 The palace of the king they neared.
 Then Raghu's son to Bharat, best
 Of duty's slaves, those words addressed :
 ' Pass onward to the monarch's hall,
 The high-souled Vanars with thee call,
 And let the chieftains, as is meet,
 The widows of our father greet.
 And to the Vanar king assign
 Those chambers best of all, which shine
 With lazulite and pearl inlaid,
 And pleasant grounds with flowers and shade.'
 He ceased : and Bharat bent his head ;
 Sugriva by the hand he led
 And passed within the place where
 Stood couches which Satrugna's care,
 With robes and hangings richly dyed,
 And burning lamps, had been supplied.
 Then Bharat spake : ' I pray thee, friend,
 Thy speedy messengers to send,
 Each sacred requisite to bring
 That we may consecrate our king.'
 Sugriva raised four urns of gold,
 The water for the rite to hold,
 And bade four swiftest Vanars flee
 And fill them from each distant sea.
 Then east and west and south and north
 The Vanar envoys hastened forth.
 Each in swift flight an ocean sought.
 And back through air his treasure brought.
 And full five hundred floods beside
 Pure water for the king supplied.
 Then girt by many a Brahman sage,
 Vasishtha, chief for reverend age,
 High on a throne with jewels graced
 King Rama and his Sita placed.
 There by Jabali, far revered,
 Vijay and Kasyap's son appeared ;
 By Gautama's side Katyayan stood,
 And Vamadeva wise and good,
 Whose holy hands in order shed
 The pure sweet drops on Rama's head.
 Then priests and maids and warriors, all
 Approaching at Vasishtha's call
 With sacred drops bedewed their king,
 The centre of joyous ring.
 The guardians of the worlds, on high,

And all the children of the sky
 From herbs wherewith their hands were filled
 Rare juices on his brow distilled.
 His brows were bound with glistening gold
 Which Manu's self had worn of old,
 Bright with the flash of many a gem,
 His sire's ancestral diadem.
 Satrugna lent his willing aid
 And o'er him held the regal shade :
 The monarchs whom his arm had saved
 The chouries round his forehead waved.
 A golden chain, that flashed and glowed
 With gems the God of Wind bestowed :
 Mahendra gave a glorious string
 Of fairest pearls to deck the King,
 The skies with acclamation rang,
 The gay nymphs danced, the minstrels sang.
 On that blest day the joyful plain
 Was clothed anew with golden grain
 The trees the witching influence knew,
 And bent with fruits of loveliest hue,
 And Rama's consecration lent
 New sweetness to each flower's scent,
 The monarch, joy of Raghu's line,
 Gave hugest to the Brahmans, kine
 And steeds unnumbered, wealth untold
 Of robes and pearls and gems and gold.
 A jewelled chain, whose lustre passed
 The glory of the sun, he cast
 About his friend Sugriva's neck :
 And, Angad Bali's son to deck,
 He gave a pair of armlets bright
 With diamond and lazulite.
 A string of pearls of matchless hue
 Which gleams like tender moonlight threw
 Adorned with gems of brightest sheen,
 He gave to grace his darling queen.
 The offering from his hand received
 A moment on her bosom heaved ;
 Then from her neck the chain she drew,
 A glance on all the Vanars threw,
 And wistful eyes on Rama bent
 As still she held ornament.
 Her wish he knew, and made reply
 To that mute question of her eye
 Yea, love the chain on him bestow
 Whose wisdom truth and might we know,
 The firm ally, the faithful friend
 Through toil and peril to the end,
 Then on Hanuman's bosom hung
 The chain which Sita's hand had flung :
 So may a cloud, when winds are still
 With moon-lit silver gird a hill.
 To every Vanar Rama gave
 Rich treasures from the mine and wave ;
 And with their honours well content
 Homeward their steps the chieftains bent.
 Ten thousand years Ayodhya, blest
 With Rama's rule, had peace and rest.
 No widow mourned her murdered mate,
 No house was ever desolate.
 The happy land no murrain knew,
 The flocks and herds increased and grew.
 The earth her kindly fruits supplied,
 No harvest failed, no children died.
 Unknown were want, disease, and crime
 So calm, so happy was the time.

The World of Books.

MEN OF MIGHT IN INDIA MISSIONS by *Helen H. Holcomb (Oliphant, Anderson and Ferrier, London and Edinburgh, 1901.)*

This is a work of much interest to Indians generally. It is written in a simple style and places before us the leading epochs in the evolution of Protestant Missions and the methods of work of those whose labours inaugurated and developed them. Not only to Christians, but to Hindus and Mohammedans also, this is a work of much interest. It is not given to man to decide what shall be the results of his labour: the trend and the purpose of social evolution are beyond the limited range of human vision. Those only are among the elect of men who decide the methods of work—such methods as are most fruitful—for the use and advantage of the men who come after them. We are of opinion that the author has certainly made a successful attempt to place before us in clear and simple language the salient features of the lives and labours of those who have led the van and determined the leading phases of the movement of Protestant proselytism, and her work will prove of value both to those who wish to advance the cause and to those who are labouring to oppose and thwart it.

Bartholomew Ziegenbalg was the founder of the Danish Mission in Tranquebar. His companion was Henry Plutschan, and others joined the mission afterwards, in particular, Schwartz of Tanjore fame. The chief work of these men, was the Tamil translation of the Bible. They also, of course, built churches and made converts. The Rajahs of Tanjore, little dreaming how unscrupulous Christianity is apt to prove as a disruptive social force, gave every sort of encouragement to these missionaries. Schwartz, it is well known, helped the Tanjore Rajah a good deal in his relations with the Madras Government and Mohammed Ali. The Rajah himself, to the great disappointment and annoyance of Schwartz, remained a staunch Hindu, like the great majority of the people of India to-day. But, then as now, starvation was the steady friend of the Christian Missionaries and secured him a satisfactory harvest of converts from among the poorer classes.

Carey, Marshman, Ward, and Duff in Bengal, Wilson in Bombay, Anderson in Madras, and Noble in Masulipatam are sketched in this book as representing the later type of the zealous and hard working Protestant educational Missionary—a type so well known to Indians who have received

high English education. These men have also done a good deal of valuable literary work in the way of translating the Bible into the vernaculars. But their main vocation was education and they are according to our author, "the exemplars of what educational work as an evangelising agency can do for India." It is worthy of note that these early educational missionaries made numerous and notable Brahmin converts, while their successors in this field of Mission work have notoriously failed in producing similar results. The explanation lies on the surface. In those early days, as in ours, our people had so strong a faith in the superiority of their own religion to all others that they could not even dream of the possibility of any members of the Hindu community preferring Christianity to Hinduism under any circumstances. They never suspected that young minds, unless carefully watched and looked after are, in the hands of clever, earnest, and skilled tacticians as some of these Christian Missionaries are, merely like clay in the hands of the potter. Now-a-days, the Hindu castes and families are apt to be more vigilant when they send Hindu children to Christian Missionary schools; and, moreover, English schools and colleges have sprung up everywhere. So the danger of conversion is nowhere now so great as it once was.

Scudder's life is taken up by our author to represent the type of the Indian Medical Missionary,—a very attractive person than whom none is more successful in attracting Hindus of the lower castes into the Christian fold. The American Missionaries have made this branch of mission work their own. The author gives an interesting sketch of the life of Gordon Hall, the pioneer of American Missionaries. The American Missionaries have also taken an important share in the work of English education and in the work of translating and distributing the Bible, and have also made large numbers of converts.

We must protest, before concluding this review, against the way in which the author, in season and out of season, applies the contemptuous epithet of "heathen" to the people of India. Its use now is as justifiable as the use of the term "Mlecha" by Hindus in speaking of Europeans. The author is also apt frequently to speak of India as "an idolatrous land" and of its "perishing millions,"—perishing, not by starvation but for want of knowledge in the absurd and idolatrous dogmas of the religion which the Church palms off as the religion of Jesus upon an ignorant and superstitious population in both Eastern and Western lands. We can never excuse fanaticism like the author's in educated Christian men and women.

"GEMS FROM VALMIKI" by G. Seshacharlu, *Editor of Sasilekha, a Telugu newspaper.* (Price Re. 1-4-0.)

This book which is cheap enough for the matter it contains and for its get up, is a collection of celebrated passages taken from all the *kandas* of Sanskrit Ramayana of Valmiki and is intended to serve the same purpose as Dodd's "Beauties from Shakespeare." To each verse is appended a clear translation in faultless Telugu which must be of immense help to those who do not know Sanskrit.

Life and sayings of Paramahansa Ramakrishna: Translated into Telugu by Sri K. R. V. Krishna Rao Bahadur, B.A., *Zemindar of Polavaram* (Price 5 annas.)

"The life and sayings of Ramakrishna" has had the honour of being written in the English language by the celebrated Sanskrit Professor F. Max Muller and the Telugu version of it has now the equal privilege of being given to the public by an enlightened Zemindar. The Telugu rendering of it is so happy that it does not betray even the least sign of a translation. There is no doubt that the book will be well appreciated by those for whom it is intended.

MICHAEL FERRIER by H. Frances Poynter (*Macmillan's Colonial Library.*)

A well-told story which is written with singular force and nerve from end to end. Michael Ferrier, a young poet of ultra-violent emotions falls in love with Helen Umphraville, the god-daughter of Lady Mills. A complication is created by the infatuation of Lady Mills' own son for Helen, whose affections have been centred already on Michael. The vacillation of Helen's father leads to a virtual fight between the rivals and in a moment of mad frenzy Michael shoots his rival, the son of Lady Mills. The murder is supposed to be a suicide, but remorse preys upon Michael and sends him to an untimely grave. The sex of the author is seen to good effect in the delineation of the ladies who play important parts in the story. These are drawn with great vigour and innate truth. To the same cause is perhaps attributable the fact that the male characters are quite feeble and effeminate conceptions.

TREGARTHEN'S WIFE by Fred. M. White (*George Bell and Sons, Indian and Colonial Library, London.*)

A queer tale of the ancient and outlandish customs of the imaginary Cornish Isle of Tregarthen. The Lord of the isle who derives his name from the estate is an autocrat who wants to

preserve the old and antique habits and traditions of the islanders, ruthlessly interdicting the influx of the progressive ideas and customs of modern civilization. This attempt is frustrated by the bold project of an American heiress, who by showing her legal title to be the mistress of Tregarthen, drives Tregarthen out of his wits, but brings him round in the end and makes of him an up-to-date gentleman from the wreck of the 'noble savage' he was originally. We cannot say that the novel is very happy either in its conception or execution.

BONDS OF STEEL by J. S. Fletcher (*George Bell and Sons, Indian and Colonial Library, London.*)

A tale illustrating the *Contretemps* so common in real life where a husband of literary and accomplished tastes is mated for life to a narrow-minded conventional woman, who cannot get out of the ruts of the notions imparted to her in her childhood. Holme Rosse, a fine up-to-date novelist whose wife is of the conventional type falls madly in love with Hope Temple, a young lady of genuine sympathies and cultivated intellect whom he chances to meet in the lake district. Rosse flies away from Hope when he realises the situation. Later on he publishes a novel in which he devotes himself to art and truth in defiance of received notions. This event leads to a separation between the husband and wife. Even the death of their only son fails to soften the heart of the obdurate woman, who holds that her soul is endangered by a moment's contact with a man holding the opinions professed by her husband. In a state of mind bordering on frenzy, Rosse again falls in with Hope who nurses him through a serious brain fever and gradually restores him to his normal state of health. Needless to say that Hope and Rosse find themselves suited to each other and exchange vows. Hope satisfies herself personally that Rosse's wife never loved him, and then goes off with him to the Continent, there to work out their common destiny safe in each other's love and confidence.

LUDUS AMORIS by Benjamin Swift. (*George Bell and Sons.*)

A very readable and amusing novel with two curiously complicated love stories, some vivid descriptions of London low-life, and a peep or two into more exalted spheres. The story opens with a rogue, a flower-girl and miser, and then leads up to a *denouement* in which the miser turns out to be the good genius of a fast young man who-broken in fortune and reputation-is compelled to enter the service of a rich country squire as a groom. In that capacity he wins the liking, and good will, of his master by his horsemanship, and the heart of his master's

daughter, as a lover. Dorothy, the young lady concerned, is the *fiancée* of her groom-lover's brother but as Vincent Woodbridge—the fascinating groom—is under an alias she does not suspect the relationship. On his part Vincent Woodbridge, owing to his estrangement from his family knows nothing of his brother's engagement to Dorothy. Of course everything in the end turns out for the best. In the two love stories each person marries his or her affinity and Justin the old miser dies leaving the bulk of his fortune to Vincent Woodbridge. Dr. Prideaux a character in the novel is an interesting study in psychology and Mr. Harbottle's love of flowers is very happily hit off. We cordially recommend the novel.

WHEN LOVE FLIES OUT OF THE WINDOW by Leonard Merrick (George Bell and Sons.)

Since he wrote the "Worldlings" Mr. Merrick has produced nothing so good as "When love flies out of the windows." The story is of the slenderest description but the characterization is clever, the dialogue natural and unforced, and the incidents such as frequently happen in the every day *Bohemian* life of the great metropolis of London. The heroine moves however in a respectable quarter of *Bohemia*, and revolves, first around the cheap and tawdry footlights of a *café chantant* in Paris while the hero is nothing more than a failure as a Novelist and nothing to mention as a Journalist. How the charming Meenie Weston eventually succeeds and endeavours to repay her husband for all his kindness to her, in her hour of affliction, how Lingam resents this dependence on his wife: how, in consequence, love flies out of the window, and lastly how it returns is told with much skill and spirit. Incidentally a lurid light is reflected on the fate which only too often overtakes innocent English girls when they imprudently engage to act on the Parisian stage in a questionable quarter of that gay city.

A Commercial Geography of Foreign Nations By F. C. Boon, B.A., Methuen & Co., London.

This is a companion volume to a previous publication in this series entitled "A Commercial Geography of the British Empire." The book therefore treats only of the world outside the British possessions. In the introductory chapter the author deals at length with the various general causes which go to affect the commerce of a country for good or bad. The author thinks that a general knowledge of a country's physical features and climate must enable the intelligent student to deduce in

many cases what industries are suitable to its inhabitants and what commercial facilities it possesses. Mr. Boon urges therefore that the following details should be noted as starting points for the study of commercial geography of a country. The details being Latitude Environment, Coast-line, Elevation, Relief aspect, Ocean currents, Prevailing winds, Lakes, Vegetation, Communication Nature of Coast and lastly Rivers. On such a basis Mr. Boon gives an account of the trade and industry of the foreign nations of Europe, Asia, Africa, North America, Central America, West Indies, South America and the Pacific Islands. In the end there is an index of chief products and manufactures which facilitates easy reference.

THE NATIVE STATES.

This is the title of a new weekly published at the "*Brhadmavadin Press*, Triplicane. In the "Ourselves," the aim of this journalistic enterprise is thus set forth. "We do not propose to tread the ground covered by our contemporaries, but only supplement their labours by a method wholly foreign to their present line of policy. Our primary object shall be the Protected States, and the affairs in British India will occupy a very subordinate place and that too merely for purposes of illustration. We are aware that the task we have imposed upon ourselves is by no means a light one. To the ordinary difficulties to which journalism in India is subject, will be added the greater ones of having to deal with territories and governments which have not made, at any rate in the matter of journalism, that advance which to the glory of the governing race. British India has made, and where the tradition of the freedom of the press and the utility of public criticism have yet to gain that deep root which they have gained here. The distance that separates one state from another, the difference in aims and sentiments, the difference in language, education and enlightenment, and all similar differences, however much they may render the undertaking, attractive, yet throw in the way difficulties of a most practical kind, which we can only hope to surmount with the indulgence of our readers and that kindly tolerance of the Rulers of these States which an earnest desire to serve them and a common land is entitled to get."

The first number before us is promising, and we have no doubt a venture like this will prove of great service if conducted on the lines set forth in the opening number.

Topics from Periodicals.

PERSONAL INFLUENCE OF THE SOVEREIGN OF GREAT BRITAIN.

Professor Oscar Browning whose name is not unfamiliar to readers of the *Indian Review* contributes to the June number of *The Century* an interesting paper on "The Royal family of England."

It is a common idea, not only in England, but in all parts of the British empire, and indeed among English-speaking people, that the sovereign of England reigns, but does not govern, and some might go so far as to say that the government of England is a monarchy in form, but a republic in fact. Professor Oscar Browning controverts this:

This is an exaggeration of the truth. No change, indeed, could be more momentous, if such a revolution were conceivable, than that from a monarchical to a republican constitution in England. For nearly a thousand years the monarchy has been bound up intimately with every department of the national life. The king appoints his ministers, his bishops, judges, and is, unlike the President of the United States, an integral part of Parliament. He declares war and concludes peace. All communications with foreign courts run in his name. The difficulty of dispensing with the monarchy in England is shown by the example of the only occasion in which it was attempted. After the execution of Charles I, a commonwealth was established in these islands; but, besides the difficulty of getting the new order of things recognized in Scotland and in Ireland, Cromwell soon found that it was almost impossible to carry on the machinery of administration without the authority of the crown. The desire of the Protector to make himself king was based, not upon personal ambition or hypocrisy, but upon the necessity of reviving the only basis upon which acts could legally be done or obedience readily secured. Not only is the crown the only tie which binds together the motley complex of dependencies differing in language, religion, laws, and history,—indeed, in everything which makes a nation,—which compose the British empire, but the sovereign is aware of this every day, is intimately acquainted with everything that happens throughout the extent of his dominions, and feels a personal interest in everything which may affect the happiness of his subjects.

The writer then gives two or three specific instances in which the late Queen Victoria made her influence felt. It appears that when Lord Lytton, as a young man, was charged with affairs at Copenhagen in 1864, he received a despatch from Lord John Russell, who was then foreign minister, ordering him to inform the Danish ministry that England would help the Danes if they should be attacked by Germany. Mr. Lytton (as he then was), with rare courage and sagacity, put the despatch in his pocket, and said nothing about it. A few days later another despatch arrived, saying that the assistance promised would not be given. What had happened in the meantime? The first despatch, presumably of a preliminary character,

had been sent with the approval of Lord Palmerston, but without the knowledge of the Queen. When a final despatch in the same sense was submitted for the Queen's approval, she refused to agree to it unless she received a request in writing signed by the united cabinet. She knew that such unanimity would not be forth coming, and the despatch was withdrawn.

Another instance cited relates to the Queen exercising her power as head of the English Church in regard to the appointment of Dr. Tait as Archbishop of Canterbury. Mr. Disraeli, who was then prime minister, wished to appoint some one else, probably Dr. Eliott. The Queen withstood him bravely, and succeeded in seeing the nomination of the man of her choice. We read in the life of Bishop Wilberforce:

"The Church does not know what it owes to the Queen. Disraeli has been utterly ignorant, utterly unprincipled; he rode the Protestant horse one day, then got frightened that he had gone too far and was injuring the county elections, so he went right round and professed views never heard of . . . He recommended . . . for Canterbury! The Queen would not have him, and then Disraeli agreed most reluctantly and with passion to Tait."

We next turn to the share of the sovereign the nomination of ministers and the formation of cabinets.

The precise extent to which the Queen was accustomed to interfere with the appointment to individual offices will not be known until the records of the reign have become accessible. As we have said, she objected to Disraeli in 1846, and she vetoed the appointment of Lord Palmerston as leader of the House of Commons in 1852. It is reported that she objected to Mr. Labouchere having a seat in the cabinet in 1892.

The writer then describes at length the social influence of the court on English society. The Queen and the Prince not only exhibited a pattern to every family, but they rigorously excluded from any participation in the court circle those against whose character there could be the faintest breath of slander.

Not only was the Queen the accepted standard on which rank and fashion modelled themselves, but she was the idol of the middle classes. This was brought about, in a great degree, by her unaffected and broad-minded piety, which could reverence the Church of England in England and the Church of Scotland in Scotland, and give Gordon's Bible an honored place among the treasures of Windsor Castle.

But it was greatly influenced by her care for all her servants, her personal knowledge of them and their affairs, her sympathy with everything that might affect their joys and sorrows.

HIS MAJESTY KING EDWARD.

In the article which we have already referred to, Prof. Oscar Browning devotes considerable space to describing the great influence the present King in his former capacity of Prince of Wales exercised in society. As the late Queen spent so many of her widowed years in retirement, the burden of social duties which attach to the crown was borne by the present King as Prince of Wales.

Says the writer :—

By no one could they have been more admirably executed. It has often been asserted that the Prince more than once desired to take a more active part in practical politics, but that the leading statesmen on both sides always discouraged this ambition. The question of the marriage with a deceased wife's sister is, if I remember rightly, the only discussion in which the Prince actively intervened in the House of Lords, and the Commission for the Housing of the Poor was the only one on which he sat. This abstinence, whether voluntary or enforced, gave emphasis to the social influence which he always exercised on the largest scale. He had, of course, his own friends, "the Prince's set," and his own club, the Marlborough, to which no one was admitted unless his candidature was approved by his Royal Highness. But his exuberant vitality, his goodness of heart, and his devotion to the welfare of his country, have always led him to take an interest in every department of national life.

Nor was this a passive or mechanical interest. There is probably no one in England who has played an important part in any department of affairs who has not been brought into personal relations with the Prince, and has not felt that something like a tie of friendship existed between them.

He always accepted invitations to preside at important public and private meetings, was ready to lay the foundation stone of many a savings-bank. He took great interest in the stage and his efforts to develop and enhance the study of classical music in England were great.

The position of the Prince of Wales enabled him to extend hospitality to many persons of all complexions whom the strict rule of court traditions might have excluded, and unless some means can be found for supplying the gap under his reign, the loss will be severely felt. Of the dinners at Marlborough House, and of the

visits to Sandringham, no published record exists, but no one can live in London society without knowing how widely and beneficially these agencies have been used to reward every merit and to bring together every form of patriotic endeavor.

Of our present Queen the writer observes that she is beyond all praise as a pattern of womanhood, a wife, a mother and a sovereign.

THE KING AS A LEADER OF SOCIETY.

Lieut.-Colonel Newnham-Davis writes brightly on this subject in the *Pall Mall* Coronation number. He says, after paying high tribute to the King's Hospital Fund:—

No great scientific discovery has been made, no crusade against disease undertaken, no national exploring expedition has been sent forth, that the King has not shown a keen interest in the work or venture. Whether it be listening to Marconi explaining his system of telegraphy, or going carefully through the plans of a great hospital to be built under his immediate direction, or saying "God-speed" to the officers of an Antarctic expedition on the deck of their vessel, or presiding at a meeting of the governors of a great Institute, the King during the past forty years has always been on the crest of the oncoming wave of science and charity, and to the men of brains and energy, authors, inventors, explorers, the pioneers of the day, he has shown marked favour.

The manner of the British gentleman of to-day is formed upon the manner of the King when he goes amongst his friends—the genial, easy, unaffected bearing and speech of a man of the world at home amidst any surroundings. No man has ever been impertinent to the King—no man could be. The haughty nobleman of the early Victorian era has gone out of date. The King has shown that dignity is not *hauteur*, and that a perfect bearing is not obtained by lessons from a "master of deportment."

As a society leader, says the writer, the King's influence has been distinctly for good.

THE CONVERSION OF INDIA.

Dr. William Sharpe of Ireland writes to the May number of the *Arya* a short paper on the subject. He is of opinion that Christianity as set forth by the missionaries is every day losing ground.

Up until about the middle of last century it was very effective, among all denominations of the reformed Church. It bore fairly good fruit in the evolution of noble and upright men. And indeed with us to a lesser extent it does so still. But the masses do not now believe in the Bible as they did heretofore, hence the falling away, and the great and urgent need for a new restatement of the Christian religion on a more reasonable and scientific basis. This need many of our leading clergymen see clearly and consequently they no longer preach the old orthodox doctrine. Their teaching, now, whatever their Church be, is on a Unitarian basis. They set forth the prophet of India as a great exemplar of the life that man ought to lead; but beyond this they do not go; it is the Christ within, that is the divine spirit in man, and not any vicarious Christ without that they insist upon as needful to regeneration and salvation. But whilst the term "Christ within" is plain and satisfactory enough to many, it is so mixed up in the minds of most people with the vicarious personal Christ that it leads to much misunderstanding and confusion of ideas.

But furthermore our advanced clergy of all denominations of the Reformed Church inculcate a high morality between man and man; and whilst as I said, the masses are falling away from Orthodox Christianity, there is a continually increasing number of the more highly educated that are as, it were, forming a new Universal Church of a much higher and altogether more reasonable Christianity than any we have had heretofore. They are, as I did, forming the basis of a Universal Church on advanced Unitarian lines. And pre-eminent amongst these teachers are the professed Unitarians. These men accept the historical Jesus rather as a great teacher and prophet than as a God in the flesh. He is their great ideal man whom they are to imitate in their daily life. Now this is reasonable and firm ground to stand upon; for man's ascent has always been through the worship, that is, the contemplation and imitation of ideals and of ideal excellence. And here is a nexus or common ground of agreement for both the East and the West. The inculcation of a high system of morality between man and man, a system based on the laws of life and nature which cannot be broken by any with impunity will form the basis of the only religion that can now survive in the world. This system of religion when expanded and amplified by the ancient lore and learning of the East and especially of India, will react beneficially upon your people; for it will be a re-statement of your own religions as well as of Christianity.

Dr. Sharpe concludes thus:—

But as regards the wholesale conversion of India that Missionaries aim at by the old exploded orthodox forms of Christianity with its hundreds of irreconcilable, not to say bitterly opposed sects, it would, looking at its present results all over Christendom, be most undesirable. It is therefore futile and indeed ridiculous for these conflicting sectarian Missionaries to be trying year after year to convert to their respective creeds a shrewd and intelligent people, which creeds being in their nature incredible and unreasonable the "intellect" of their own country has long since rejected.

THE STANDARDISATION OF VILLAGE RELIEF WORKS.

Mr. Rendall of the Indian Civil Service advocates the adoption of the system of village relief works in times of famine in an article in the June Number of *East and West*. The writer does not say that village works should be started at all costs, and on that point he would like the decision to lie with the officer on the spot.

The writer claims "that our system of village relief works will accomplish all that is required in the simplest manner; will show a defined task, will let the worker know what he ought to get, and will admit of his getting it daily."

The system is of course, a piece work system, with payment purely by results. He is of opinion that this system can be applied to excavation work especially on small tanks and in a slightly different form to forest relief works. Here are a few of the more important advantages set out by him, of village relief works as a system of famine relief.

(1) Village works can be opened near people's homes; families can work together when they like under a minimum of restraint from rules and regulations.

(2) Homes and cattle need not be abandoned and helpless dependants need not be moved.

(3) Work runs on almost automatically, so that the village officers or a strong village *panch* might carry it out unaided.

(4) Daily payments can be made without addition of staff and with a minimum staff.

(5) There is only one *dasture* taker instead of an army of them.

(6) A maximum wage can be enforced without difficulty.

(7) There is no herding in camp or in hospital, forms of restraint which hill tribes cannot endure.

(8) Inspection is easier.

(9) There is less chance of an epidemic, less panic if it does come, less harm done if there is a panic.

(10) Workers can be easily shifted in case of cholera or the like.

(11) There is no division of authority: the revenue officer must have entire control.

(12) There are few records to keep.

(13) The expense especially of establishment is infinitely less.

He suggests in addition that lightly equipped travelling dispensaries should visit small works periodically and observe,

"If we are to save life at any cost, it is surely better to do so by the agency of village relief works than by feeding all comers gratis. It is not only cheaper to open village works than to give a minimum wage on large public works, but the opening of village works may save the common people from the demoralising influence of free rations."

VALUE OF WATER IN INDIA.

Under this rather 'catching' heading General J. F. Fischer, R.E. revives the very old question "Railways versus Irrigation in India" in the current number of *The Asiatic Quarterly Review*. Those who favour the extension of railways in India allege that India possesses a good and sufficient water supply for all purposes. Even the present Viceroy stated that it was impossible to extend irrigation in India to more than three millions of acres, and that nineteen millions of acres were already provided with sources of irrigation. Mr. Fischer in the course of his article contests this view in a vigorous manner. He observes "It is much to be regretted his lordship did not give the data on which this estimate was arrived at, but we can examine it in a general way in this manner, and see if it is at all near the mark. India contains about 1,700,000 square miles or 1088,000,000 acres of land, and according to the above estimate, it is only possible to irrigate about one-fiftieth of this enormous area from the great rivers flowing through all this territory! Now, if only 12 inches of rainfall runs off one square mile of land, and is properly stored in good reservoirs, the yield is upwards of 1,000,000 cubic yards of water, quite sufficient to irrigate 100 acres of paddy cultivation or 170 millions of acres in all India, instead of the 22 millions Lord Curzon supposes it possible to irrigate."

Passing on to particular instances, he points to two projects which were recommended for the Central Provinces, but which still remain unsanctioned. The possibilities for irrigation in those provinces and lower down along the course of the Godavari river appear to be immense, but for want of proper reservoirs along the larger tributaries, all the water that flows into these from the Western ghats and the Vindhya range runs waste into the sea.

"If only 10,000,000 acres of land (in the Central Provinces) had been provided with proper means of irrigation, for which there is an abundant water supply always available in those provinces, not only would the Government revenue have been placed on a secure and sound basis, but the frightful loss of life of man and beast would certainly have been avoided, whilst the surplus water from all this irrigation must find its way into the main drainage of the Godavari basin, and keep that river navigable for about 500 miles inland throughout the year, and finally all this stored water would reach the Godavari anicut, and afford most abundant means for irrigating the delta in the hot weather where it is so much needed."

But no, the Government would not mind it, nor could they forget their railway programmes whatever their usefulness to the country.

"Over 300 million sterling has been spent on the railways in India, and they have not increased the value of real estate by a single farthing."

What a burden this is on a country like India can be easily estimated from the following figures: In the United States of America the revenue from goods traffic is earned at the rate of about 1s. a ton a year. In the United Kingdom the rate is about 2s. 6d. a ton a year, and in India the rate is about 12s. a ton a year, so that besides burdening this country with a debt of over 300 million sterling, and a chronic deficit in all its budgets, India has to pay this enormous tax to support the railway system, which cannot by any possibility prevent famines occurring. When it is pretended that railways have been of the greatest use in times of famines in carrying food to the districts so afflicted, it must be remembered they are paid for all this work out of the public taxes, and the charitable contributions sent to India from all parts of the Empire; the revenues thus obtained cannot by any possibility promote or develop any industries whatever, and hence it is that the accumulation of capital in India has been so prevented since these works were established here that the bazaar rates for lending money has more than doubled in the last fifty years, and the income of the population has been diminished in proportion, except in such districts as the Godavary, Tanjore, etc., where the Sowcars have been almost abolished by a good system of irrigation, by which the people are enabled to carry on their industries without having recourse, to these usurers, by whom the ryot is ground to the dust; and until the Government alter this policy, and provide the people with the only means by which they can by any possibility carry on their agriculture securely, there is no hope for India, and England may look to have this country as an intolerable burden on her hands.

Alluding to irrigation works in the Madras Presidency and their administration the writer delivers himself thus:

In the Godavary district 1 cubic foot per second irrigates about 66 acres of land; in the Krishna district this is said to be as high as 90 acres per cubic foot of flow; but in the Tanjore district this quantity of water irrigates only 22 acres; so it is very easy to form an idea of the frightful waste of water now prevailing in India by such a haphazard system of revenue management since the mainstay of Indian finance is attended to in this manner. Another instance can be given: During the last twenty years some 60 lacs of rupees have been spent on the tank restoration scheme in Madras. In the report there is absolutely nothing to show how the tanks have been improved, if any increased area has been brought under irrigation, if any proper registration of catchment areas, rainfall run off, losses by evaporation and percolation, have been maintained. Nowhere is it exhibited in any of those annual reports what quantity of water is required to be stored for an acre of land and what quantity runs off to waste; the cost of establishment is not even noticed. And such a system of loose administration is declared to be quite perfect and faultless, and India requires nothing better. There is not a shadow of a doubt that fully half or more of the available rainfall of the country is utterly wasted by what is called "a potent political and moral force."

ALL ABOUT ALUMINIUM.

Professor Andrew Jamieson M. Inst. C.E., &c., in *Chambers's Journal* for last month gives a beautiful summary of an exhaustive paper read at a meeting of the Glasgow Section of the Institution of Electrical Engineers by Mr. William Murray Morrison the general manager and engineer at the Falls of Foyers Aluminium Works in Scotland, on 'The Production, Properties, and Uses of Aluminium.' The Falls of Foyers are considered the finest in Scotland, and the scenery and foliage of the surrounding country are unsurpassed. The prospect of harnessing these falls gave room for dismal statements of the dire effects that would ensue. In view of similar opinions held by people in this country as regards "Cauvery Power Scheme," which by the way we may observe has proved a success, the following account of the working of the Falls of Foyers which was given with the help of photographic lantern slides to refute those apprehensions, will be found to be interesting; as also that of the properties and uses of the metal.

The water-power is derived from the river Foyers, which has a catchment-area of about a hundred square miles. To equalise the supply, two lochs have been joined together by the raising of dams and embankments, thus making one continuous loch between five and six miles long and half a mile broad, containing a sufficient quantity of water to run the entire plant of the factory for fifty continuous days and nights. The water from the river Foyers is passed through a tunnel eight and a half feet in diameter, cut through the solid rock to a chamber from which separate cast-iron pipes lead it downhill to the turbines in the factory, situated on the shore of Loch Ness. These turbines work under a water-pressure equivalent to a vertical height or 'head' of three hundred and fifty feet of water. Their discharge is passed directly into Loch Ness by a tail-race without being contaminated by any foreign matter. There are seven large Girard turbines driving seven continuous-current low-pressure dynamos of seven hundred electrical horse-power each, for the sole purpose of actuating the electrical furnaces. Besides these larger turbines, there are two small Pelton wheels for driving electric-light dynamos and small motors throughout the factory. The whole plant has worked night and day without trouble in the most satisfactory manner, and the proportion of the work got out of it to its fullest capabilities was 90 per cent., which ratio has been termed the 'load factor.' It will thus be seen that fully five thousand horse-power is employed day and night throughout the year in the production of aluminium—the lightest of all metals known to commerce; further, that these works can now turn out this metal in ingots at from one shilling to one shilling and fourpence per pound, whereas sixteen or seventeen years ago it cost about twenty shillings per pound by the old chemical process. Moreover, commercial aluminium is produced from day to day with a regular purity of 99.5 per cent., having only mere traces of iron and silicon for the remaining .5 per cent.

Water-power, if skilfully applied, has, up to the present, proved by far the most economical means of

generating electrical energy for the aluminium electrolytic furnaces. There cannot be the slightest doubt that the Falls of Foyers generate power at less than four pounds per electrical-horse-power-annum—that is, a year consisting of three hundred and sixty-five days of twenty-four hours each, or a total of eight thousand seven hundred and sixty hours work, at the rate of working of one horse-power passing through the furnaces.

PROPERTIES OF ALUMINIUM.

Undoubtedly the chief characteristic of aluminium is its unusual lightness. If a certain volume of water weighs 1 lb. at a certain place and temperature, then the same volume of commercially pure cast-aluminium at the same place and temperature would weigh only 2.6 lb., whilst cast-iron would weigh 7.4, cast-copper 8.6, and cast-lead 11.4 lb. It is therefore, bulk for bulk, less than one-fourth the weight of lead.

The tensile strength of pure cast-aluminium varies from five to eight tons per square inch, with only 2 to 3 per cent. elongation. But when this same casting has been properly rolled into plates or drawn into wire it will stand a stress of seventeen tons per square inch, with 2 to 4 per cent. elongation before breaking.

Aluminium melts at 625 degrees centigrade or 1325 degrees Fahrenheit, and its shrinkage in the casting is next to that of lead and zinc, amongst the common useful metals, being practically one fifth of an inch for every foot of length of the casting. It is the third most malleable and the sixth most ductile of the metals. It can be therefore be hammered down to the forty-thousandth of an inch in thickness, and is now fast replacing silver-leaf whilst wires of it are made less than one hundredth of an inch in diameter. It conducts electricity with fully 60 per cent. of the ease of pure copper of the same dimensions.

USES OF ALUMINIUM.

Aluminium is an excellent substitute for iron and copper in the case of cooking utensils or for food plates, from the fact that it readily conducts heat, is very slightly tarnished or affected by acids, and its salts are absolutely harmless.

It is hoped that one of the great uses for aluminium will be that of acting as an electrical aerial conductor. Certainly it is less affected by dry or damp air at any atmospheric temperature than any of the other ordinary metals; but, with the exception of replacing copper and iron for heavy electrical engineering conductors, it has not hitherto been very successful, owing to a want of homogeneity when used for small telegraph or telephone wires. Manufacturers and electricians are, however, busy investigating the properties and behaviour of several of the aluminium alloys, for this and for other kindred applications. One of these alloys, composed of 1.29 per cent. nickel, 1.08 per cent. copper and 96.8 per cent. pure aluminium, with .4 per cent. silicon and .1 per cent. iron, gave the very high breaking load of 45,900 lbs. per square inch. Another of the largest and most useful applications of aluminium is attained by its addition in very small quantities to iron, steel, brass, and certain other metals or alloys before they are run out into moulds. This has the extraordinary effect of making these molten metals much more fluid, of reducing the blow-holes, and rendering the castings more ductile, tougher, and more homogeneous and uniform in every way.

EARTHQUAKES AND VOLCANOES.

Science Staffings publishes a detailed account of the recent disaster at Martinique and at St. Vincent.

THE MARTINIQUE DISASTER.

It appears that the immediate cause of the terrific explosion which blew off the top of the Mount Pelee crater and overwhelmed the town of St. Pierre in fiery ruin, was the presence of a large lake in the heart of the old crater. The intense and sudden rise of temperature converted the mass of water into steam, with the result that the whole top of the mountain was blown away. Estimates of the loss of life in Martinique remain at 40,000.

The awful event began about eight o'clock, when the volcano threw up a great mass of smoke and earth.

A whirlwind of fire immediately followed. The whole town of St. Pierre was instantly in flames, and the ships in the harbour were burned.

The shower of rocks lasted a quarter of an hour, and the sea during the catastrophe withdrew for a distance of 100 ft., coming back steaming with fury. St. Pierre burned all day and all night, overwhelmed by the outburst from Mount Pelee. Three minutes after the outburst the town was totally destroyed.

There was a volcanic eruption also of La Soufriere at St. Vincent and many people were killed there.

The volcano of Mount Pelee was lost in eruption during the month of August, 1851. Previous to that, in 1767, about 1,600 people were killed by an earthquake in Martinique. In 1839 the then capital, Fort Royal, now Fort de France, was visited by an earthquake which, destroying about half the town, caused great damage throughout the island and killed about 700 persons. Mount Pelee is the loftiest mountain on Martinique, and is 4,430 ft. high. When it was in eruption in 1851 flames and volumes of black smoke and fine ashes burst suddenly from the crater and threw the people of St. Pierre into a panic. They fled from the place, many taking refuge on the ships in the roadstead. The eruption on this occasion was not serious, only covering some hundreds of acres with sulphurous debris, but it was enough to show that Mount Pelee was not dead, but sleeping.

THE ST. VINCENT DISASTER.

The following is an account of this disaster :—

The St. Vincent volcano La Soufriere was in a state of eruption for nine consecutive mornings. On the Wednesday morning terrific explosions occurred, and at seven o'clock there was another sudden violent escape of steam. This ascended for three hours, when a quantity of solid and fluid matter was ejected. At noon three craters appeared to open, and began to vomit lava. Six streams at once ran down the sides of the mountain, making an awful scene. The mountain laboured heavily for half an hour after the appearance of the lava, and fire flashed around the edges of the craters. Tremendous detonations followed in quick succession, rapidly merging into a continuous roar. This lasted through Wednesday night until Friday morning. The thundering was heard throughout the Caribbean sea.

The eruption began on Wednesday. A huge cloud in dark, dense columns, charged with volcanic matter, rose to a height of eight miles from the mountain top, and darkness like midnight descended. The sulphurous air was laden with fine dust, and black rain followed the shower of scoriae, rocks, and stones. Numerous bright flashes, marvellously rapid, were seen, and these but intensified the horror inspired by the thunder of the earthquake, the roar of the lava, and rush of falling stones. Large areas of cultivation were buried, and plantations and villages were totally destroyed, the former being partly submerged by the sea. On the windward coast seven plantations were totally destroyed. The whole of the Carib country in the same locality was covered with ashes and lava to the depth of two and four feet.

CAUSES OF SUCH DISASTERS.

There are two chief causes of such disturbances—first, volcanic explosions and, second, overloading of the contiguous earth's surface. The St. Pierre disaster, say some of the scientists, was caused by the latter.

By overloading is meant the carrying down of silt or sand by large rivers, thus creating an extra pressure on a certain spot of the thin surface of the earth. This increases until it makes a slight crack in the crust of the earth, causing the eruption of lava or a disaster like the earthquakes of Lisbon and Charleston. The West India Islands, including Martinique, are especially exposed to this danger. They are the depositing ground for all the sand, silt and sediment washed down by the Ohio and Mississippi Rivers, besides all the smaller ones which flow into the Gulf of Mexico and deposit their enormous loads among the West Indies.

The surface of the earth is very thin in proportion to its bulk. The skin of an ordinary orange, so it is estimated, is much thicker, in proportion to its size, than the rind of the earth upon which we tread. Any very serious alteration in the weight which rests upon this thin earth surface, therefore, is liable to cause a pressure which will result in earthquakes and similar disturbances. Every region, whether of land or water, that lies at the foot of a long sloping territory, and thus at the mouth of great rivers, is in danger of such sudden disasters as have befallen at Lisbon, Charleston, Peking, Mts. Pelee and Soufriere.

In his book, "The Earth's Beginning," Sir R. S. Ball ascribes the cause of volcanic eruptions to the following conditions of the earth's interior.

The internal heat of the earth, derived from the primeval nebula, is in no way more strikingly illustrated than by the phenomena of volcanoes. There is no longer any reason to believe that the earth is fluid in its interior. Evidence proves that, under the extraordinary pressure which prevails in the earth the materials in the central portions of our globe behave with the characteristics of solids rather than of liquids. But though this applies to the deep-seated regions of our globe, it need not universally apply at the surface or within a moderate depth from the surface. When the circumstances are such that the pressure is relaxed, then the heat is permitted to exercise its property of transforming the solids into liquids. Masses of matter near the earth's crust are thus, in certain circumstances, and in certain localities, transformed into the fluid or viscid form. In that state they may come from a volcano and flow in sluggish currents.

WHAT VOLCANOES EJECT.

Steam usually constitutes about 90 per cent. of the ejecta, or matter thrown out from volcanoes. The remainder of the material is generally composed of volcanic rocks, such as lava, cinders, etc. Usually there are two classes of this ejecta, the molten lava which comes from one type of volcano, and cinders and mud from another. Of the lava flowing volcanoes Vesuvius and the volcanoes of Hawaii are examples. These usually give many days' warning before their eruptions, owing to the fact that the viscous or molten matter, which is thick, like treacle, rises slowly towards the surface, making rumblings and earthquakes before the overflow takes place.

EXPLOSIVE VOLCANOES.

Those volcanoes which eject cinders and mud, are usually suddenly explosive. Therefore they are more dangerous. Of these types we have the volcano of Colima, in Mexico; the volcanoes in Central America, the Caribbean volcanoes and some in the Andes range. The great explosion of Krakatoa, which took place in the Straits of Sunda in the year 1883, was of the latter type. The explosion from this volcano was so great that the atmospheric waves were projected three times around the earth.

A GOOD WORD FOR THE VOLCANOES.

The following is an *excerpt* from *Invention*.

Nobody would, of course, dare to say a good word for a volcano at the present moment. Let visitors to the South Kensington Museum, however, bear in mind that by far the larger part of the highly-prized gems there displayed have been formed, directly or indirectly, by plutonic agencies. The volcanic crater was the laboratory where the diamond was formed. The only diamond mines, properly so-called, in the world are those in South Africa, in the vents of very ancient volcanoes. Unfortunately, not every world-old vent is a diamond mine, but possibly many are that are not suspected. Your volcano is an alchemist that turns the commonest materials into things of beauty—carbon, alias charcoal, into the diamond; quartz, otherwise silica (or common sand), into the purple amethyst, the yellow citrine or cairngorm, the green chrysoprase, the pink rose-quartz, the dark jasper, and the black morion; common clay, otherwise alumina, into the beautiful ruby and sapphire; and simple compounds into the garnet, the topaz, and the emerald. The elements are neither rich nor rare, but their crystals formed in the subterranean recesses of the volcano are gems of price. Nor are these the chief products, for nearly all the mineral veins of gold, silver, copper, iron, lead, tin, bismuth, mercury, and the rest have been thrust into the rock fissures by the force of these volcanic fires.

SALT-TAX.

In the "*Madras Review*" for the past quarter Mr. Ganjam Venkatratnam Pantulu recounts the history of Salt-tax in India from the year 1869, the policy adopted by Govt. from time to time with

reference thereto and the opinions expressed by various statesmen—as Secretaries—of State and Viceroys—as regards the injustice of maintaining such a high rate of duty on an article of consumption so essential to the poorer classes of people. On the latter question Mr. Venkatratnam observes,

"Again, no single tax can be rightly appreciated without reference to the financial system of which it forms a part—a system under which the public burdens are most unfairly and unequally distributed, the richer few, who profited most by British Administration, paid least while the poorer millions, who profited least paid most."

The writer points out that the Indian National Congress has never asked for the abolition of the Salt-tax but for a remission of the additional duty imposed on that article in the year 1888, which would have entailed a loss of no more than 178 lakhs of rupees and that the financial condition of the Imperial treasury justifies this remission. Incidentally he comments upon the extraordinary powers vested in the Executive Government of India of enhancing at pleasure the duty on salt up to the maximum of Rs. 3 of which, he says,

"It is a question whether in any country where a separate Legislative and Executive authority is constituted by law, such reserve powers of discretionary taxation are in fact ever conferred on the Executive authority by the legislature."

A PLEA FOR THE SOWKAR.

Mr. Goinaji sets up in the pages of the June number of *East and West* a rigorous plea for the sowkar. All the evils that the Indian ryot is heir to, have been attributed by Government to the sowkar or money lender, and a regular crusade has already begun against this class of men as a whole as will appear from the legislative measures recently adopted by Government in the Punjab. The writer turns the table upon Government when he says:—

"Whatever may be the reasons, it is patent that the ryots, though robbed and kept down, do resort for loans to the sowkar rather than to a beneficent Government whose hard and inquisitorial rules for the payment of loans far outweigh the small benefit derived from a low rate of interest."

He endeavours to prove by means of facts and figures that the costliness of justice which the Government provides is the real cause of evil; the sowkar being obliged to charge high rates of interest in order to cover the court costs. Mr. Goinaji writes "It ought not to be forgotten that a money-lender alone is not responsible for bleeding the ryots. Ensure a safe and less risky and less expensive method for the recovery of his money, and the money-lender is sure to lower his rate of interest. Let there be more of justice and less of law, and then see if the result is not satisfactory. At least give an opportunity to the much mis-understood sowkar to show that he is not outside the pale of Hindu Society, whose contentment is proverbial."

"MADE IN GERMANY."

To the May number of the *Chautauquan*, George B. Waldron contributes a well illustrated article on the subject of the industrial and commercial progress of Germany since the time when Bismarck laid the foundations for this commercial mastery by forcing upon his country the adoption of the gold standard. The writer's admiration for Bismarck in this respect is unbounded.

Germany may sometimes forget to honor Bismarck, she can never escape the power of his genius. Not content with welding the German States into one compact kingdom, this man of iron made his country a world-nation. The battle of Waterloo confirmed England as mistress of the world; the fall of Paris marked the beginning of a strife which, in a quarter of a century, placed Germany by England's side as a successful rival in the arts of peace.

Under the gold standard, Germany's credit expanded to an extent before unknown. She became independent of England and her manufacturers gradually awoke to the situation. The result is that her exports have doubled since 1880 and this improvement has been very widely distributed among the countries of the world.

In the eight years from 1893 to 1900 the gain in her exports to her chief rival, Great Britain, has been 32 per cent. She has added 52 per cent. to her exports to Switzerland, 94 per cent. to exports to Norway and Sweden, and 137 per cent. to those to Russia. To British India she sent an additional 39 per cent. and to the rest of Asia 66 per cent. more than eight years ago. Her export trade to Australia has advanced 116 per cent. and she sends 98 per cent. more goods to Africa.

What have been the causes that in so short a period have brought about this enormous expansion in Germany's foreign trade? The English had the advantage of a long start in their race for the world's markets and the Americans had the ingenuity, push, and a sort of general gumption requisite for the race while both were absent in the case of the German.

He has won his commercial victories by the hardest kind of grinding toil. His slow, methodical, scientific mind has grappled with the question, point by point, detail after detail, and he has spared no pains, time, nor money to work out a solution. His country stands to-day side by side with England and America as a commercial world-power, because he has mastered the art from top to bottom.

English merchants, with that long-headed shrewdness that had given them their success discovered before Germany itself perceived it, that goods were made there cheap and well and had gone quietly into the German markets, bought manufactured goods and shipped them abroad in their own ships as their own manufactures, there having been then no "made in Germany" stamps on the goods. The German soon discovered his mistake. The transport and the market problems

were soon grappled with by merchants and manufacturers, ship-owners and professors and the mighty resources of the government itself were directed upon it. The following are the improvements effected in Germany in their commercial methods.

Consulates have been strengthened by one or more commercial *attaches* who give their entire attention to this field. In some cases the innovation is being practised of abolishing permanent consuls altogether. In their stead the government appoints experienced and capable merchants whose training fits them for this work. Industrial commissions have been sent to South American states, to Mexico, China, Japan, to South Africa—in short, to any people among whom trade extension is probable. These commissions report on the conditions, needs, and demands of the people. The German takes care that his goods are supplied in the manner most familiar to the people. If the barrel is the customary package, he uses a barrel of the usual form and size, even though he may know that a box would serve the purpose better. If goods are to be carried by camel, or donkey, or by whatever conveyance, he puts them into packages suited in size and weight to local demands.

An Oriental Commercial Museum was opened in Berlin in 1900 to facilitate trade with the Orient. A sample warehouse contains the agricultural and industrial products of these countries. There is a staff of merchants and paid correspondents at work collecting information at the Eastern centres. These reports are collected and put into form by the Oriental Bureau of Information, which issues two important publications. A reading room is connected with the museum that contains these publications as well as numerous files from Oriental centres.

The Germans have opened sample rooms for the exhibition of their wares among the leading nations with whom they seek to do business. This is done by the combination of a number of manufacturers interested in the same lines of goods. Their wares are on exhibition at leading centres, in charge of men who thoroughly understand and are ready to explain their qualities and methods of operation.

The Germans have spared no pains in making easy the path from the home factory to the far-away consumer. A few years ago much of their products were taken to their destination in English ships. Now all this is changed. Vessels flying the German flag carry 70 per cent. of all her commerce. The actual tonnage of her ships is about 1,600,000 tons, placing her next to England. A series of commercial treaties has been made with leading agricultural states of Europe whereby foodstuffs are particularly favored in admission to Germany.

Another government encouragement to foreign commerce is the payment of bounties on certain home products for export. The chief beneficiary is sugar.

That "trade follows the flag," is pretty strongly fixed in the Teuton mind. Hence the tremendous gains made in world territory by Germany in the past few years. Prior to 1884 she was practically without a colony system. Banks have been established in all the chief South American centres.

The German government aids in keeping "the people and products of the country before foreign nations" by voting money to aid schools abroad in which is taught the German curriculum. The object is to induce boys of German ancestry, born abroad, to retain their citizenship and interest in the Fatherland.

DEPARTMENTAL NOTES.

Educational.

STUDY OF ENGLISH COMPOSITION.

The Pedagogical Section of the Modern Language Association has endeavoured to test the opinions of competent Judges on the question whether the methods of teaching composition now so widely followed are beyond the reach of criticism. The reports that came back in response to enquiries generally emphasized the fact that composition is an art rather than a science and therefore can be mastered only by practice; and this preferably under competent instruction. One of the most elaborate of the reports covers a large number of the questions. The writer of the report observes:—

"I understand the topic for discussion to be the college study of prose composition and diction both theory and practice. This study, by whatever name it be called, is not uniformly valuable in all its parts. Diction cannot, to any great degree, be directly inculcated. Assuming that, in general, diction may be improved as well by reading as by writing, we have still unanswered the whole question of composition in the literal sense; i.e., of construction. But this is the proper domain of rhetoric. *The main business of rhetoric with undergraduate mass is to teach by precept, by analysis of masterpieces, by example, logical composition.* It is also clearly within the province of rhetoric, as we now use the word, to teach artistic composition. The teaching of rhetoric must devote its main time to the training of the average student on the logical side. Let me explain what I wish to include in that term. Argumentation, of course, debate, and other kinds of speech making. Persuasion must always remain for most men the main skill sought by rhetoric. Logical progress, in the whole and in every part, the lucid conduct of a theme to its conclusion, is attainable by every student through courses in rhetoric; it is attainable, without immensely great labour, in no other way; and through courses in the history of literature or through "wide" reading without practice it is not attainable at all. "Reading," in the sense of logical analysis, the study of the whole frame work and of each part is of course directly contributory; but this kind of "reading" is confined practically to courses in rhetoric. This logical grasp, this bringing of knowledge to bear

which is one of the most fundamentally valuable result of a college education, is subserved more directly, I believe, than in any other single way, by the teaching of rhetoric."

EDUCATION IN AUSTRALIA.

One of the most encouraging features, says a correspondent of *Invention*, of Australian social life is the general encouragement, both public and private, given to the work of popular education. In each of the federating States ample provision is made for supplying the means of public instruction, and improvements are continually being made with a view to making it as practical and complete as possible. In each of the States the system of public instruction is under ministerial control.

In New South Wales educational affairs are administered by a special department, the official head of which is a member of the State Ministry. The present system dates from 1880, when provision was made for the establishment and maintenance of public schools, to afford primary instruction to all children without sectarian or class distinction; of superior public schools, in which additional lessons in the higher branches might be given; of evening public schools, with the object of instructing persons who had not received the advantages of primary education while of school age; and of high schools for boys and girls, in which the course of instruction should be of such a character as to complete the public school curriculum, or to prepare students for the Sydney University.

Provision is also made for the establishment of training schools for teachers. It is enacted that Local Boards shall be appointed, whose duty it is to visit and inspect the public schools placed under their supervision, to supersede teachers in cases of misconduct not admitting of delay, to endeavour to induce parents to send their children regularly to school, and to report the names of parents who refuse or fail to educate their children. Children may attend private schools, if a certain standard of education be afforded, in preference to those provided by the State.

In addition to the public schools, State assistance is given to the Sydney Grammar school, two industrial schools, a school for the deaf, dumb, and blind, and a couple of reformatory schools; the total State expenditure for educational purposes in 1900 being £780,215; the actual amount, after deducting the revenue from school fees, being £697,721, the whole of which was defrayed out of State funds.

Literary.

HERBERT SPENCER'S LATEST WORK.

In his principles of Sociology Mr. Spencer traced the baneful influence of a revival of militarism on individual character. That these baneful influences are upon us in full flood is evident from the following description of individual and social tendencies in *Facts and Comments*, his latest work. "Literature, journalism, and art have all been aiding in this process of re-barbarisation. For a long time there have flourished novel writers who have rung the changes on narratives of crime and stories of sanguinary deeds. Others have been supplying boys and youths with tales full of plotting and fighting and bloodshed, millions of such having of late years been circulated. As indicating most clearly the state of national feeling we have the immense popularity of Mr. Rudyard Kipling in whose writings one-tenth of nominal Christianity is joined with nine-tenths of real paganism; who idealises the soldier and glories in the triumphs of brute force and who in depicting school life brings to the front the barbarising activities and feelings and shows little respect for a civilising culture. More and more the spirit of conflict has been exercised by athletic games, interest in which has been actively fostered, first by the weekly Press and now by the daily Press, and with increase of the honours given to physical prowess there has been decrease of the honours given to mental powers. Meanwhile literature and art have been aiding. Books treating of battles, conquests, and the men who conducted them have been widely diffused and greedily read. Periodicals full of stories made interesting by killing with accompanying illustrations have every month ministered to the love of distinction; as have, too, the weekly illustrated journals. ~~On~~ In all places and in all ways there has been going on during the past fifty years a recrudescence of barbaric ambitions, ideas, and sentiments, and an increasing culture of blood-thirst. If there needs a striking illustration of the result we have it in the diotism of the people's Laureate that the 'lordliest life on earth,' is one spent in seeking to 'bag,' certain of our fellow-men!"

MR. MORLEY'S LIFE OF GLADSTONE.

Mr. Morley's "Life of Gladstone" which is expected from Messrs. Macmillan before the end of the present year, is to be succeeded, and to a certain extent supplemented by a "History of Modern England," which Mr. Herbert Paul has undertaken to write for the same publishers. The history will be in four volumes, covering the period beginning with the Anti-Corn Law movement and the Irish Famine, and closing with the end of the

Rosebery Administration. Messrs. Macmillan expect to have the first volume ready next year. We read that Mr. Herbert Paul, who is also among the biographers of Gladstone, is a very close student of political history, in politics, a Liberal of the older school, a fine scholar, and master of an epigrammatic style which has a tendency to become *staccato*.

THE LATE LORD ACTON.

Lord Acton, whose death is reported, was a man of considerable learning. He had been Professor of Modern History at Cambridge since 1895 and was Romanes Lecturer at Oxford last year. He was one of the Royal Commissioners on Historical Manuscripts and a Trustee of the British Museum. He was born in 1834 and succeeded his father as a baronet in the year that Queen Victoria came to the throne. He was created a Baron in 1869. He was a Roman Catholic with very liberal and somewhat anti-Papal views. He was educated at Oscott under Cardinal Wiseman and at Munich under Dr. Dollinger, the historian. He sat as a Member of Parliament from 1859 to 1869, when he was raised to the Peerage by Gladstone. He published singularly little considering his mental attainments, a lecture on "The Study of History," published in 1895, being his best known work.

GOLDWIN SMITH ON UNIVERSITIES.

In making knowledge the object of a university we are reverting to the original ideal, says Professor Smith. High knowledge it ought to be; a university is not intended to be a mechanic's shop. Academic institutions must adapt themselves to the general demand. "Business" is now everything. We must be prepared to meet and to confute the allegation that the office-boy at fourteen is worth more than the university-bred man at twenty-four.

Universities, however, will forfeit general confidence if they cannot put a check on the monstrous development of athletics.

LAMARTINE AND VICTOR HUGO.

When individuals have sailed together a certain number of years, says Lamartine, they become friends from a similarity of destinies, from sympathy of views, from resemblances of places, times and moral living together in the same ship sailing toward an unknown shore.

To be contemporaries is almost being friends, if they are good. The earth is a family hearth; life in common is a kindred relation-ship. One may differ in ideas, in tastes, even in convictions, while they are floating, but we cannot keep from feeling a secret tenderness for the one that is floating with us. Such are my feelings for Hugo; such his for me. We are diverse—I do not say equals, but we like one another.

Legal.

ROMAN JURISTS AND ENGLISH LAWYERS.

Professor Bryce in his recent book on "Studies in Jurisprudence" draws the following contrast between Roman Jurists and English Lawyers.

"What is it," asks Mr. Bryce, "which we admire in the Roman jurists and in the Roman law generally? The characteristic merits of the Roman law are its reasonableness and its consistency. It is pervaded by a spirit of good sense. Except in two departments, those of the paternal power and of slavery, its rules almost always conform to considerations of justice and expediency. Very little needs to be excused as the result of historical causes. Even slavery and the *patria potestas*—the former universal in the ancient world, the latter so deep-rooted among the Romans that it could never be altogether expunged—are in the later centuries so steadily and carefully mitigated that most of their old harshness disappears. The moral tone of the law is, take it all in all, as high as that of any modern system; and in some few points higher than our own. By its consistency I mean the harmony and symmetry of its parts, the maintenance through a multiplicity of details of the leading principles, the flexibility with which these principles are adapted to the varying needs of time, place, and circumstance. So the excellence of the jurists resides in their clear practical sense, in the air of enlightenment and of what may be called intellectual urbanity which pervades them. Most of them express themselves with a concise neatness and finish which gives us the pith of their view in the fewest and simplest words. They dislike what is arbitrary or artificial, taking for their aim what they call elegance (*elegantia iuris*), the plastic skill (so to speak) in developing a principle which gives to law the character of Art, preserving harmony, avoiding exceptions and irregularities. Yet they never sacrifice practical convenience for their theories, nor does their deference to authority prevent them from constantly striving to correct the defects of the law as it came down from their predecessors.

"Compare Lord Coke, for instance, or Lord St. Leonards, with Papinian or Gaius. Lord St. Leonards was a man much admired by the profession and his books secured an authority unsurpassed or indeed equalled by any other legal writers of the century. His knowledge was immense and it was minute. His treatises show the same acuteness and ingenuity in arguing from cases which his forensic career displayed. But these treatises are a mere accumulation of details, unilluminated and unrelieved by any statement of general principles. In literary style,

and no less in the cast and quality of his intellect, he is harsh and crabbed. How different are the Roman jurists. They reason and they write as men who have been thoroughly trained, who have been imbued with a large and liberal view of law, who have philosophy and analysis and the sense of historical development equally at their command."

THE TEST OF DRUNKENNESS.

It seems that in Philadelphia, as well as in Boston there is some difficulty in finding a satisfactory test of drunkenness. For example (according to the *Baltimore Sun*), Judge Audenried, of the License Court, asked a witness—an agent of the Law and Order society—what was his definition of "drunk."

"I regard a man as drunk when he is visibly affected by liquor," was the answer.

"Yes; but we would like you to be more specific," said the court.

"Well, I take it from a man's conduct, the general appearance of his face; but I do not necessarily mean that he shall stagger. Others have a habit of leaning against the rail around the bar."

"I notice that while giving your testimony you yourself have been leaning on the bench. You wouldn't have us regard that as being an evidence of intoxication on your part, would you?" inquired Judge Audenried.

"The agent colored up and answered that he would hardly like the court to consider the question in that light."

"Judge Ralston said he understood that saloon bars were supplied with rails for the purpose of leaning against."

WOMAN'S POSITION UNDER THE FRENCH LAW.

At the Grafton Gallery, on Saturday, (March 22) the Anglo-French Association held its fourth reunion of the year. Mr. H. Mesnil, a French barrister practising in England, delivered a lecture dealing with the position of women under the French law. Mr. C. Hopwood, K.C., presided. Mr. Mesnil, who spoke in French after complimenting the association on the good work it was doing by helping to promote a friendlier feeling between the people of France and England, said the position of women in France and England was full of contrasts. In France women were permitted to practise as barristers, while they were denied political rights. In England, they possessed more individual liberty. True, Englishwomen as yet were politically unenfranchised, but they were allowed to exercise a municipal vote, and to sit on boards of guardians. A Frenchwoman's voting prerogative was limited to a purely commercial sphere. Mr. Mesnil had a great deal to say on the marriage and divorce laws of both countries. In France it was not necessary as in England for the wife-petitioner to prove cruelty in addition to infidelity in order to obtain a dissolution of the marriage tie. The lecturer doubted if the Frenchwoman was always understood and appreciated by her foreign critics. In this respect he feared his countrywomen often suffered injustice. There was a certain class of literature which was largely responsible for this. Very frequently it was little better than a caricature of the French woman, for in order that it might be interesting it portrayed exceptions. As well might they undertake to judge all the women of England by the standard of Pinero's problem plays. A discussion followed.

Trade & Industry.

REASONS FOR THE COMMERCIAL SUCCESS OF CHICAGO.

H. M. Consul at Chicago in a recent report to the Foreign Office states it as his opinion that the commercial success of Chicago is partly owing to the education which teaches the boys independence and knowledge of their future responsibilities, and does not set the professions above business as a means of gaining a living.

Athletics of all kinds are much encouraged in schools and universities, but very few men continue to take part in them after completing their education. Americans are as fond of outdoor life, shooting and fishing, as are the men of any European country, but they gratify their taste as a relaxation only, and never allow it to interfere with their business.

Another cause of success is the keeping of the money, which has been made in the business, and the brains which have made the business, in it as long as possible, and great thought is devoted to arrangements whereby, after the death of the builder of the business, it shall not fall into the hands of his heirs, unless they are practically fitted to take care of it.

Another and probably the chief cause is the reward of merit. The percentage of men fitted for the highest posts in business is very small compared with the total numbers employed, and the heads of the big businesses, bank corporations and wholesale firms, are always looking out for men, not only among those already in their employ, but also outside, capable of filling some posts under them.

To these men, when found, large salaries are given which are drawn by them as long as they show that they are capable of earning them.

Men employed in business houses of all descriptions are encouraged to discover new methods of carrying on the business which may in any way lessen the cost of production or carrying on business, and specialisation is carried on to an extreme point. (*Foreign Office Annual Series*, 2,763.)

AMERICAN COTTON IN INDIA.

From whatever point of view they may be regarded writes the "*Indian Agriculturist*" the facts detailed by the President at the recent Annual General Meeting of the Upper India Chamber of Commerce in connection with the experimental cultivation of American cotton at the Cawnpore Agricultural farm are of exceptional interest and importance. It has been conclusively proved on the farm that, in a few years, by a system of cultivation which any intelligent ryot can adopt, American cotton

can be not only thoroughly acclimatised, but made to yield five times as great a weight per acre of fibre suitable for spinning up to 60s. as Indian cotton, cultivated in the ordinary way, yields of a fibre suitable for spinning only up to 20s. In short, as the President remarked, it has been placed beyond doubt that a mine of wealth lies literally at the feet of the cultivator. Under any ordinary circumstances, it might be supposed that a discovery of this kind would mean the dawn of a new era of prosperity for the ryot of Upper India. But there is no reason to think that it means anything of the sort. On the contrary, it is practically certain that, as the President went on to predict, the utilization of the discovery, if left to the Government and the people, will be but a slow process, if indeed it does not prove entirely barren, and it will be British energy and enterprise that will revolutionise the cultivation of cotton in India, if it is revolutionised at all. The fact is that, in the absence of some much more effective means of influencing the practice of agriculture than the Government possesses under the present system, all the agricultural farms and experiments in the world are doomed, as far as the advancement of the Indian cultivator is concerned, to be little better than effort thrown away. British energy and enterprise may, and where, as in the case under notice, the way to large profits is clearly shown, no doubt will, step in. But, though this may add to the wealth of the country, it does not necessarily mean increased prosperity for the mass of the people. Even as far as the country as a whole is concerned, it means, at the best, that the British capitalist will share the profit that might have been entirely its own.

JAPANESE GOODS IN CHINA.

In forwarding a list of articles manufactured in foreign countries and now being used by the Chinese, Mr Miller, U.S Consul at Newchwang, says:—The Japanese are imitating a vast number of foreign goods and putting a cheaper quality on the market; they are especially shrewd in imitation of brands. Something of the expansion and diversification of the trade of Japan will be observed from the great variety of things she sells to China. She understands the nature and character of the requirements, and caters to the peculiar artistic taste of the masses and their desire for very cheap goods. There is a constant increase in the variety of imports into China, and one of the causes of success in the French trade, and still more in German trade, is the attention given to the desires and wants of the Chinese in regard to small lines of goods, and the ornamentation of goods and packages.

—*Boyd's Commercial Guide for China.*

Medical.**TREATMENT OF SLEEPLESSNESS.**

DR. E. S. Pettijohn read an interesting paper on this subject at a recent meeting. In speaking of the drug department for insomnia, he states that he has found the use of trional most effectual when the patient is unable to sleep soon after retiring. Ten to fifteen grains are administered in a glass of hot milk and repeated in a half hour, on the belief, and from the experience of three years, that the effects begin within an hour after administration. If the patient is able to fall asleep, but awakens frequently, or after a few hours' rest, and finds it difficult to sleep, sulphonal, ten to twenty grains is administered in the same manner at five o'clock in the afternoon, and again at bedtime. Its effects often last during the next day and night, and it should be given only alternative days. A simple aqueous solution of sodium or lithium bromide, ten to fifteen grains, given three times, half hour apart, before retiring, inhibits functional energy of the protoplasmic constituents of the nerve centres, the blood-vessels contract from a lessened blood supply, and sleep follows. In cases of muscular agitation the fluid extract of conium added to the bromide aids in reducing the cerebral excitement.

CHARACTER TOLD BY THE LIPS.

People who have studied the subject claim that the mouth is the most instructive feature in the face. They say that not only does it originally show certain fundamental and inherited traits, but it also acquires lines which reveal an individual's efforts to mould his character one way or the other.

Thus persons with thin lips, sharply drawn down at the corners, and rather bloodless and spare, are generally men and women of narrow and unchangeable views, whose sympathies it is almost impossible to arouse. Obstinacy and self-righteousness are their besetting failings.

Again the woman with very full and very red lips of the "pouting" variety, is generally fond of ease and pleasure. Great constancy and enduring tenderness are not likely to be numbered among her virtues, but she is ardent in her temperament and very impulsive.

Lips continually curved upward, slightly pouting and red may be very pretty; but do not denote that their owner is full of sympathy or has had any deep experience of life.

HOW WORRY AFFECTS THE BRAIN.

It is believed by many scientists who have followed most carefully the growth of the science of brain diseases that scores of the deaths set down to other causes are due to worry and that alone. The theory is a simple one—so simple that any one can readily understand it. Briefly put, it amounts to this: Worry injures beyond repair certain cells of the brain; and the brain being the nutriment centre of the body, the other organs become gradually injured, and when some disease of these organs or a combination of them arises, death finally ensues.

BOOKS AS MEDICINE.

Mr. Brown, the Finsbury librarian, has compiled an amusing list of the curative uses of books. He divides therapeutic books into four classes:—(1) Books which may be used as remedial agents for the specific mental disturbances, such as, for example, those which induce the condition known as the "Hump," or by such fanciful and pet names as the "Pip," the "Blues," or the "Sulks," (2) Books which have a curative value in cases of general physical debility, sometimes aptly indicated by such expressive phrases as "Out of sorts," "Run down," "Seedy," the "Horrors," &c. (3) Books which possess valuable therapeutic properties in cases of specific maladies like toothache, corns, water-brash, or flatulence. (4) Books which can be used as anodynes or stimulants for particular mental or psychological conditions. Some of the best narcotics are Plutarch's *Lives*, Gibbon's *Decline and Fall*, Browning's *Poetical Works*, and Bunyan's *Pilgrim's Progress*. The *Encyclopædia Britannica* is also recommended, but it is important to use the ninth edition, as some of the earlier editions are really interesting.

LICKING POSTAGE STAMPS.

Licking postage stamps is a very common practice, and one that but few people would associate with danger of disease of any sort. Of course, illness traceable to this cause is rare, but that it does sometimes occur no one can doubt. But aside from the disease-germ theory of abstaining from this practice, it certainly is not a cleanly habit, nor is it a necessary action. It is a good deal easier and safer to lick the envelope, or, what is better, moisten the corner of it with the finger-tips and water, and then apply the stamp. A wet handkerchief will dampen the envelope sufficiently to make the stamp adhere. While great care is taken in the preparation of the mucilage that is put upon postage stamps, it is impossible to insure the perfect health of the persons who handle them. An employee with an inoculable disease might spread his ill condition through a whole country. It may not be necessary to warn everyone, but those who have never had their attention called to the subject will not fail, upon a moment's reflection, to see the folly of licking postage stamps.—*Health*.

Science.

A BIG KITE.

At the recent meeting in Edinburgh of the Scottish Meteorological Society, a kite fitted with apparatus for taking observations in the higher parts of the atmosphere was exhibited, previous to being handed over to the Antarctic Expedition for use in the regions of the South Pole. This kite is of the box or Hargreave pattern, and comprises a bamboo framework covered with cloth, being about seven feet square and three feet deep. Its 'string' consists of four miles of pianofortewire, which is both light and strong, and this wire is wound on a drum. The kite carries an aneroid barometer, a thermometer, an hygrometer, and a photographic camera with which bird's-eye views of the landscape can be secured. The three first-named instruments constitute a meteorograph, and their variations are continuously recorded on one drum turned by clockwork. The length of wire used will give the kite an altitude of fifteen thousand feet, and in strong winds it will be necessary to employ an oil-engine of two horsepower to turn the winch which brings it to earth. Hitherto no observations have been made concerning the condition of the upper atmosphere in the polar regions, and this kite will supply the deficiency.

POPULAR ERRORS IN METEOROLOGY.

Professor Gannett, of the United States Geological Survey, has written a paper treating of popular errors in meteorology and geography. A few of his points are summarised in what follows:—

FORESTS AND RAINFALL.

An example of the persistence of error is the idea that the presence or absence of forests has an influence on the amount of rainfall. Some keen observer long ago detected the fact that forested regions enjoyed a heavier rainfall than those not forested, and jumped to the conclusion that rainfall was produced by forests, and that the removal of forests diminished the rainfall. Looking over the earth, he found many treeless desert regions and forthwith instanced them as frightful examples of men's wastefulness. Syria, Northern Africa, parts of Italy, are often quoted as illustrations of man's destruction of climate. In reply, man can certainly plead not guilty. The geography of this Mediterranean region, the configuration of land and water, and the direction of the prevailing winds, are such as to give it a light rainfall, forests or no forests. The situation is really this: want of rain prevents the growth of trees; want of trees does not prevent rain.

FORESTS AND FLOODS.

Another persistent error is the belief that floods in our rivers are more frequent than formerly because of the cutting down of forests in their drainage basins. It is probable that the clearing of land by cutting away forests under growth does change the *regimen* of streams, increasing their flood height and diminishing the flow at low stages. In other words, water probably runs off or evaporates more rapidly from bare ground than from ground covered with forests. But where the forests are cut away the ground is seldom left bare; it is cultivated or quickly becomes covered with bushes which hold the water quite as effectively as forests. The main fact is, however, that the floods in our rivers are no greater or more frequent now than in the past.

HEAD AND RONTGEN RAY BURNS.

Some interesting investigations on the nature and prevention of X-ray burns, by Dr. E. Codman, are recorded in the *Electrical World*, of New York. From the statistics of a large number of cases occurring within the last five years, it has been estimated that one-tenth of one per cent of the exposures have produced burns but the percentage has very much decreased within the last year. This is considered to be due to the shortening of the length of the exposures. It is stated that the primary injury is to the nerves controlling the nutrition of the skin. The effect of the Rontgen rays on the skin, up to a certain point, seems to resemble acute "sun burning," which gives rise to blistering and destruction of the epidermis. But at this point the resemblance ceases, because the Rontgen rays occasionally extend to the deeper layers of the skin and subcutaneous tissue, even to involving the tendon-sheaths and joint. A considerable time often elapses before the burns make their appearance, the average time calculated from 70 cases being ten days. Two methods of preventing these burns have been recommended: a thin plate of grounded aluminium may be interposed between the tube and the patient, or the exposure must be kept within a certain time limit depending on the distance of the tube. A safe length of exposure for a tube at the usual distance of 20 cm. is $2\frac{1}{2}$ minutes, and this fortunately with the modern appliances is sufficiently long for most purposes. The intensity of the rays emitted by the tube must evidently be an important factor, but no information is given on this point.

General.

DRAGON BOAT FESTIVAL.

Tenth June is the feast of the Dragon Boat, and though Chinese in Hongkong mostly confine the celebration of it to firing a few crackers, in many parts of the Celestial Empire the occasion is made one of very great importance. It took its origin in the commemoration of a virtuous minister of state whose remonstrances were unheeded by his unworthy sovereign, and whose only reward was degradation and dismissal, some 450 years B.C. He committed suicide, and on the first anniversary of his death the ceremony of looking for his body was commenced; it has been continued on succeeding anniversaries ever since, and has resulted in this festival. Little packages of boiled rice, done up in bamboo leaves, are eaten at this time, as such offerings were cast into the river by the fishermen who tried to recover the body.

The dragon-boats are long narrow boats from fifty to one hundred feet in length, broad enough to seat two men abreast. The craft is propelled rapidly with paddles, accompanied by the sound of a drum and gongs which are placed in the centre of the boat. Impromptu races are got up, not unattended with accidents at times, as the boats are light and dangerous, when paddled by well nigh a hundred excited Chinamen, wild with enthusiasm and unsteady with spirits. Large crowds of spectators line every vantage ground on the banks of the rivers; and prizes of no intrinsic value are often offered by them, which are eagerly contested for the bare honour of winning spurring them on in their efforts; the crews are occasionally treated by wealthy hong on the banks. For hours and days nothing is heard but the unceasing monotonous clang of the gongs, and the boom of the deep-toned drums in the numerous boats.

"ORIENTALIZATION" OF SIAM!

The *Siam Free Press* is informed that Siam has granted to Japan a large and important concession of land, in neighbourhood beyond the Sapatoom Race Course, for the purpose of establishing a school for the development of sericultural industry in Siam. The report continues as follows:—Other concessions to the same nation are very much "in the air," also; and this is only a harbinger of those that are to follow, by all accounts. No more handy place could be allotted to the hardy and industrious Japanese for establishing the base of operations, than the neighbourhood of Sapatoom, and once the colony is firmly rooted in that fertile soil it will take deep hold; while extending its branches far and wide,

It is a sign of the times when we hear that Captain de Richelieu who has so long been connected with the Royal Siamese Navy and who rendered invaluable service to the King and country in that Department for a long period, and also another prominent official, Captain K. de Lerche and some other European officers, are resigning from service in the Siamese Navy.

These gentlemen deserve well of Siam, having rendered Yeoman service to her King, and now they retire for some reasons better known to themselves. But what is strange, we hear that their places will not be filled by other Europeans. From this we may conclude that the beginning of the "Orientalization" of Siam is near at hand.

THE CITY OF THE FUTURE.

Mr. H. G. Wells thinks that we are "on the eve of a great development of centrifugal possibilities," and, since it has been shown that a city of pedestrians is inexorably limited by a radius of about four miles, and that a horse using city may grow out to seven or eight, it follows that the available area of a city which can offer a cheap suburban journey of thirty miles an hour is a circle with a radius of thirty miles. And is it too much to expect that the available area for even the common daily toilers of the great city of the year 2,000, or earlier, will have a radius very much larger even than that? Now, a circle with a radius of thirty miles gives an area of over 2,800 square miles, which is almost a quarter that of Belgium. But thirty miles is only a very moderate estimate of speed and the reader will probably agree that the available area for the commuter of to-day will have a radius of over 100 miles, and be almost equal to the area of Ireland. The radius that will sweep the area available for such as now live in the outer suburbs will include a still vaster area. Indeed, it is not too much to say that the London citizen of the year 2000 A.D. may have a choice of nearly all England and Wales south of Nottingham and east of Exeter as his suburb.

A NEW ORDER OF MERIT FOR NATIVES OF INDIA.

It is notified that in order to provide for suitable recognition and reward for conspicuous acts of gallantry performed by natives of India, whether servants of the Government or not, in aid or support of public authority or safety, the Governor-General in Council with the assent of the Secretary of State has resolved to institute a Second or Civil Division of the Order of Merit to be conferred only for acts of gallantry performed hereafter.

The Order consists of three Classes. The insignia are—for the First Class, gold: for the Second Class, silver with a gold wreath; and for the Third Class, silver only to be worn on the left breast by a pendant from a dark red ribbon with blue edges. Admission to the Third Class is obtained by any conspicuous act of individual gallantry; admission to the Second Class can be obtained only by members of the Third Class and for a similar act of gallantry, and in the like manner the order of the First Class. In recommending persons for admission to the Order, the act of gallantry must be particularly specified, and statements of eye-witnesses to the deed must be attached.

Admission to each Class of the Order rests with the Government of India alone, and if an act of gallantry has taken place in India the recommendation for reward will be forwarded through the District officers to the Local Government for submission to the Government of India.

The Notification adds:—"Whenever a servant of Government, being a member of the Order, is dismissed the Service, and whenever any member of the order is convicted of any such offence or subjected by a Criminal Court to any such order as implies, in the opinion of the Local Government, a defect of character which unfits him to be a member of the order, a full report of the circumstances shall be transmitted to the Government of India, in the Home Department, together with an expression of the Local Government's opinion, and it shall thereupon be open to the Government of India to direct the dismissal of any member."

"As a rule the conferment of the order of merit in the Civil Division will not be accompanied by any grant of money, but the Government of India reserves the right of making such a grant in addition to conferring the order in special cases."

FRANCE AND SIAM.

Attention has recently been called to the unsatisfactory relations existing between France and Siam under the treaty and convention of 1893. The friendly relations between the two countries which had existed since 1856, underwent a change when France, after assuming a protectorate over Annam (1874 and 1884) and Cambodia (1863 and 1884), began to assert claims on their behalf to territory up to that time treated and occupied as Siamese; and the unfortunate resistance offered by the Siamese to the passage of French ships of war up the river to Bangkok, following on a rupture of diplomatic relations gave an opportunity for enforcing those claims which Siam could not resist. The treaty contains

a recognition by Siam of all the rights of the empire of Annam and the kingdom of Cambodia on the left bank of the Mekong river and its islets, and a renunciation of all pretension to that territory; and Siam also undertook to evacuate that bank forthwith, to keep no troops or fortified posts on the right bank within a radius of 25 kilometres from the river or in the provinces adjacent, to place at the disposal of the French Government all Annamites, French subjects or Cambodians, so as to allow their return to the left bank of the river, and to grant coaling stations and wood-storing places to the French Government in order to facilitate the navigation of the river. As a guarantee for the evacuation of the left bank, the port and river of Chantabun were handed over to the occupation of France, in whose hands they still remain.

Our own interest in this matter lies in the fact that in 1896 the British and French Governments entered into a convention, providing that neither Power should advance its armed forces into the region comprised in the basin of the Menam river and its tributaries, and the plane of territory lying to the North of it (that is roughly the whole centre of Siam), or acquire any special privilege there in which the other should not share. It was also stipulated that the commercial advantages granted by China to these Powers by the treaties of 1894 and 1895 respectively, relating to the adjoining Chinese territories, should be mutually available to both; and Lord Salisbury and Baron de Courcel placed on record their views that the declaration would "testify particularly to the joint solicitude of their Governments for the security and stability of the kingdom of Siam." This agreement does not secure the integrity of Siam up to the boundary fixed by the Franco-Siamese treaty of 1893, but it contemplates the continuance of the *status quo* there by its reference to the special provisions regarding the neutral zone above mentioned and the navigation of the Mekong. The circumstances of the case seem to make it a very proper subject for submission to the Hague Arbitration Tribunal, on which both parties have representatives.—*The Law Magazine and Review*.

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The Coronation of King Edward.

On Saturday the 9th, His Majesty King Edward VII. was duly crowned at Westminster Abbey. According to the report telegraphed by Reuter, the King was in excellent health and went through the entire ceremonies without faltering. The joyous event was celebrated throughout the empire in a manner worthy of the great occasion. Though in India the Viceroy had directed that all celebrations should be reserved for the Coronation Durbar to be held at Delhi in the coming December, still the loyalty of the people manifested itself in different ways, and the spontaneous and unpremeditated nature of the celebrations throughout the country has deeply impressed on the minds of all the sacredness of the tie that exists between Great Britain and India. On the eve of His coronation His Majesty King Edward sent through the Viceroy the following message to his people.

"To my people—On the eve of my Coronation, an event which I look upon as one of the most solemn and important in my life. I am anxious to express to my people at Home and in the Colonies and India my heartfelt appreciation of the deep sympathy which they have manifested towards me during the time that my life was in such imminent danger. The postponement of the ceremony owing to my illness caused, I fear, much inconvenience and trouble to all those who intended to celebrate it, but the disappointment was borne by them with admirable patience and temper. The prayers of my people for my recovery were heard, and I now offer up my deepest gratitude to Divine Providence for having preserved my life and given me strength to fulfil the important duties which devolve upon me as the Sovereign of this great Empire."

May King Edward live long and may his rule be a source of real blessing to the many million subjects of his great Indian Empire!

As supplement to this issue we present to our readers portraits of His Majesty King Edward, Her Majesty Queen Alexandra, H. R. H. Prince of Wales and Queen Victoria. To non-subscribers the portraits will be sold at two Annas a copy.

The Mysore Installation.

DURING the early part of this month all eyes in South India have been turned to Mysore where the young Maharajah, a youth of 18, has taken upon his shoulders in a very real sense, the burden and responsibilities of governing his beautiful and prosperous State with its five million inhabitants. Eight years ago by the sudden death of his popular and much loved father, while on a visit to Calcutta, the young Maharajah then a child was left heir to the second of the leading Feudatory States in India. A Council of Regency was formed with the Maharanee at the head, the Dewan, Sir K. Sheshadri Iyer as Chief Executive Officer and three heads of Departments as Councillors, with the British Resident in shadow exercising a guiding and moderating influence over all. With regard to the young Maharajah a tutor was at once sought and in Mr. Stuart Fraser of the Bombay Civil Service there was found one who by experience and character was eminently suited to the work. That Mr. Fraser has succeeded beyond the most sanguine expectations of all, and that the Maharajah has responded to the tuition and training he has been undergoing for the past eight years is more than evident from the important place allotted to him in the new constitution which came into existence on the day of his installation. Under this constitution the Maharajah is *de facto* and not only *de jure* the head of the State. He has an active and direct part in the administration of affairs. His councillors will be his advisers, His Highness being personally responsible for the conduct of affairs, the important portfolios of Government being entrusted to him. The Dewan is the Chief Executive Officer of the State, while the two Councillors will be heads of Departments, all three being entrusted with the disposal of the ordinary current routine work of Government, only such matters of this kind being submitted to his Highness for final orders as involve any difference of opinion between the Dewan and Councillors. It may be thought that far too responsible and onerous a task has been set on so young a ruler at the threshold of his career; but the objection has been met and provided for by the Government of India which has given the young Maharajah a particularly able Private Secretary, Mr. E. F. Maconochie I. C. S.

The installation itself was one of the most brilliant and impressive state ceremonies which have taken place in India for many a long year. The beautiful and interesting town which nestles under the shadow of the sacred Chamundi, the tutelary goddess of the ruling family, was looking at its best.

The people, a loyal, prosperous and contented lot, rose to the occasion and gave visible proof of their love and loyalty by tiring their town in festive garb. What added to the grandeur of the display was the presence in the town of more than a thousand British troops, Infantry, Cavalry and Artillery with their brilliant and effective uniforms. The rigid rules of state ceremonial governing an occasion like this demanded that the Viceroy must not only not share the escorts and guards of honour of his distinguished host, but must provide his own and if possible go one better; hence the presence of the Battery of artillery in his Excellency's escort. The quaint old Jagan Mohan Palace, which has played a very prominent part in Mysore festivities reached the zenith of its fame when it was made the scene of this historic and impressive function. The splendid pavilion which was specially added as an *annexe* to the Palace for the ceremonial and festivities connected with the Maharajah's marriage was enlarged, improved and specially beautified for the second and more important occasion, and it is doubtful if any who were privileged to be present will ever forget the solemn and impressive ceremonial carried out with all the military pomp and circumstance which the presence of troops, the booming of big guns and the crash of martial music always add. To the imaginative onlooker it seemed as if the details of this installation ceremony were framed so as to symbolise that the young ruler would have to stand apart, the cynosure of all eyes in the work he has undertaken to do, and many looked to see how he would acquit himself on the trying situation. Let us say at once that he came out of the ordeal successfully. Alone, with the impressive figure of one of the ablest of the Indian Viceroys towering above him, he was serene and undisturbed and went through the ceremony without a trace of nervous *gaucherie* which might have taken from the grandeur of the occasion. The Viceroy's splendid oration was listened to with attention and deference, but admiration reached its limit when the young Maharajah replied to that address with the ease and *aplomb* of a practised speaker. It was a trying day for His Highness, and if it is a sample of the working day he will have to experience, it ought not to surprise any if His Highness has already made up his mind "to scorn delights and live laborious days." We devoutly wish that the young Maharajah may long be spared to rule over his beautiful and interesting country and his loyal contented people with all the ability, sympathy and judicious vigour of which he has already given such bright promise.

THE UNIVERSITIES COMMISSION REPORT.

THE Report of the Universities Commission has been variously received. The Anglo-Indian Press of the north has given it its entire approval. Indian Journalists, on the contrary, denounce it as motivated by political jealousy and calculated to strike a blow at the spread of higher education. Others again, represented by the *Madras Mail*, see no reason to be much excited by it, and think that, for any effect it will have on the course of education in this Presidency, there need not have been a Commission at all. The Report itself is a small volume compared with that of the 1881 Commission, and though in some respects it deals with more exalted matters and makes more far-reaching proposals; it is not quite so interesting, readable or authoritative. The Commission itself was ill-composed, the tardy addition of Mr. Justice Banerjee's name only making the original defect conspicuous. Now the fact that he is the sole dissident is far from reassuring to the mind which speculates wistfully on what might have been if there had been equal representation; while the non-publication of the evidence on which the report is presumably based leaves the public without any means of judging how much or how little the result has been affected by prejudice and prepossession.

Mr. Banerjee dissents from the majority in many points, but he agrees with them in more; and some of these latter points are of great consequence. But it by no means follows that the public will agree because the Commission are unanimous; in fact certain of their recommendations are sure to meet with strenuous opposition, and may not be accepted by Government. In the present article an endeavour is made to point out some of the features of the Report which are of intrinsic importance and consider them with particular reference to Madras.

In the first place the Commission do not appear to endorse the view put forward by some Madras witnesses that Indian Universities are teaching Universities by the mere fact of their controlling the teaching in affiliated colleges. At the same time they do not think it practicable to convert them into teaching bodies at present, but suggest as first steps in that direction the foundation of central schools for advanced study in Science, History, Philosophy, Literature etc., the appointment of University Lecturers, the establishment of University Libraries and Laboratories, and the maintenance of residential quarters for scholars coming from a distance. It is no wonder that the Commissioners were not captivated with the vision conjured up by the ardent imagination of some persons here,—of a great residential University springing up fully equipped in the neighbourhood of Guindy.

No proposal for a new University receives support at the hands of the Commission. Of special interest is the reason given for discountenancing the Aligarh movement. "While no obstacle should be placed in the way of denominational colleges, it is important to maintain the undenominational character of the Universities." This sentiment must command general approval.

The Senate in Madras will consist, if the Commission's recommendation is accepted by Government, of 90 nominated and 10 elected members who will hold office for 5 years. Every year 18 of the former and 2 of the latter will vacate their places, but may be re-appointed or re-elected as the case may be. The franchise is to be extended to all graduates of 5 years' standing while the candidates for election must have 10 years' standing. Improper canvassing will involve the cancellation of an election. A Senator will be removed for continued non-attendance, and, if he has to come from a distance, may receive travelling allowance. The Senate is to consist of representatives of the colleges, of Government, of the learned professions, and of the general public. Present Fellows not appointed to the Senate are to form a

class of Honorary Fellows, and may take part in electing a member of the Legislative Council or the Municipality. It is clear that this is a great improvement on the present condition of things. The new Senate will certainly be more efficient than the old, and the power of election now enjoyed by the graduates is not only preserved, but even extended so as to embrace a larger electorate. Mr. Banerjee, however, contends that the Senate will be too much under the control of Government and experts, and puts forward another scheme providing, among other things, that there shall be an equal number of Indians and of Europeans, and that half the Senate shall be elected by Fellows from among themselves. This would be an excellent arrangement, but it is too much of the nature of a revolution to be granted by Government.

The Syndicate is to receive statutory recognition as the executive of the university independent of the Senate in the matter of exemptions, appointments, and affiliation and disaffiliation of colleges. It is to be composed of from 9 to 15 members of whom a majority shall be professors. The Senate is to elect the Syndics to represent the various Faculties. The Director is to be *ex-officio* Vice-Chairman. Residence in the University town should not be insisted on. Mr. Banerjee dissents from these proposals also, objecting to the statutory majority of professors and the power of disaffiliation vested in the Syndicate subject only to the approval of Government. Considering the great powers of the Syndicate, the confidence of the public is absolutely essential to it, and every safeguard must be provided that it may be thoroughly representative of all the interests concerned. It would appear therefore desirable to leave the election to the unfettered choice of the Faculties and not to insist on the predominance of any one interest. Certainly the professors who are naturally the most likely persons to be chosen do not need to be so protected. As regards disaffiliation, the arguments of Mr. Banerjee, though skilfully marshalled, are not convincing. Discussion in a large

house of a matter of contention is apt to create parties and embitter differences without any guarantee of the result being in accordance with the merits of the case.

Among the conditions of affiliation which, by the way, are suitably drawn up, is one to which some attention must be called. It is the provision of adequate tutorial assistance. It is to be feared that at present there is no adequate tutorial assistance. Each professor has generally only one tutor who does lecturing work like his chief, but is no tutor in the sense of the English Universities. Students, on first entering college, cannot be trusted to look after themselves, and if the tutor, like the professor, lectures to a large class and does not meet them individually, the result in most cases is disastrous. Too much emphasis cannot be placed on this requirement.

The vexed question of a compulsory fee rate has been discussed by the Commission, and the conclusion is that the Syndicate should fix the minimum rate of fees to be levied in private colleges. Government and aided colleges ought to levy higher rates than these. Poor students ought not to be tempted by low rates or other concessions to pursue a course of college study for which they are not fit. They crowd the classes at present, say the majority of the Commissioners, and impede the cause of real education. This is an unfounded statement, and the Commissioners are grossly in error to suppose that the presence of the undeserving poor student is to any extent the cause of the unsatisfactory condition of collegiate education. Mr. Banerjee is nowhere more sound than on this point, and his arguments constitute a powerful plea for freedom in the matter of levying fees. But the Commission has unfortunately resolved otherwise, and made a recommendation in favour of a compulsory rate. In Madras the agitation for such a rate will be redoubled in vigour, and, aided perhaps by Viceregal approval, even carry the day.

One of the great changes that the Commission will bring about if its advice is adopted is a complete

separation of School and College, and the eventual abolition of Second Grade Colleges. The line of demarcation ought to be very clear. The undergraduate and the schoolboy are not to dwell together in the same hostel; and the two institutions ought not to be conducted in the same building or by the same management. The methods of teaching in the school are to be entirely distinct and different from those to be adopted in the college. It is difficult to see why there should be such thorough-going separation. Besides, there is reason to fear that, if the second grade colleges were abolished, a large number of boys would be prevented from advancing beyond the Matriculation stage. For this, however, the majority of the Commissioners are quite prepared, as in their opinion this fall in the number of those that seek collegiate education is not too great a price to pay for the improvement in college life and college efficiency that will result. This opinion, one may take it, is not likely to be acceptable to the public, and it may be expected that this recommendation will call forth much angry protest. Weak second grade colleges are indeed injurious in many ways. Not only are they unsatisfactory themselves, but they render the high schools on which they live inefficient. And if a number of such institutions exist within short distances from each other, they will prevent a good first grade college ever springing up in the locality, while their mutual jealousy will perhaps stand in the way of their amalgamation. There are in this Presidency many such second grade colleges which the University may at once disaffiliate without the least injury to the cause of education. The really good second grade colleges are not many, and in the present state of things it is hard to say whether they can ever rise to the first grade. Our Syndicate would appear to have been very liberal in the affiliation even of first grade colleges, three colleges in the north being certainly too many for the welfare of any of them. Again, it is doubtful whether three places at such short distances from each other as Trichi.

nopoly, Tanjore and Kumbakonam, should be allowed to have first grade colleges ; at least one may go without any real loss. The Commission's ideal college would appear to be a large institution where there are enough professors and students living together to create an atmosphere of academic zeal and constitute, as it were, a real home of learning. A fully developed first grade college with its many professors, tutors, fellows and scholars will certainly do more good to the country than a number of second grade colleges, with a greater aggregate of professors and pupils it may be, but separated into small groups each leading a starved life. From this point of view what a gain it would be to education if the districts of Madura, Tinnevely, and Malabar sacrificed their little second grade colleges, of which there are at least eight, and made of them one efficient first grade college ! Madura is perhaps the place pre-eminently fitted to be the home of such an institution. A large, rich, and flourishing town, it has likewise a history behind it, and its traditions of Tamil Sanghams, its noble architectural remains, and its hold on the popular imagination as the fabled capital of the Pandyas are advantages of which no other town can boast. If but the enlightened citizens of Madura were alive to the possibilities of the place, and their own duties as the trustees of those possibilities, this dream could be realised at no distant period. Would the threatened abolition of second grade colleges supply the needed stimulus ?

Not the least important of the changes involved in the Commission's recommendations relate to the courses of study. The Matriculation, Intermediate, and the B. A. or B. Sc. are to be the three stages. The new B. A. course will include Philosophy as a compulsory subject and either Mathematics or History and Political Economy, besides English and a Classical Language. The B. Sc. has no English or Classical Language, but consists of either Mathematics, Physics, and Chemistry or Physics, Chemistry, and Natural Science. It appears to have been

debated whether the exclusion of English from this course would not render it inferior to, and less attractive than, the B. A. course. But the Commission has decided that the knowledge of English acquired in the Intermediate course would be quite enough for all practical purposes. Many persons, however, will think the B. A. course more liberal than the B. Sc. Without seriously interfering with the proposal, one may add a study of scientific method to make the B. Sc. more complete in itself and on a level with the B. A. In the Intermediate course History and Physiology (or Physiography) go out to be replaced by only one subject, Deductive Logic or Physics and Chemistry. The Matriculation course will drop its science, which has been such a bugbear to both teachers and taught. The Commissioners have evidently reconciled themselves to this omission, as the subject is introduced in the Intermediate course as an optional. "There are many advantages in thus deferring this discipline. The subject will be better taught, and the methods of exact science more thoroughly inculcated, and the students at this more advanced stage in their education will be less exposed to the danger of acquiring loose habits of thought and reasoning in regard to facts than in the earliest stages." But the change in courses of study of the greatest significance to Madras is the removal of all Vernaculars from the list of second languages, which in the case of the great majority of pupils will amount to a compulsory study of Sanskrit. This bold step will require that from the second form upwards in High Schools, all pupils should learn Sanskrit. Of course a candidate for the School Final Examination may not need to know Sanskrit, but may be required to show a fair command of his Vernacular. But as it is not possible for any pupil when he is in the second form to make his choice between the School Final and the Matriculation, every one will have to begin the study of Sanskrit at that early stage. So that if this change is to be given effect to, the University can do so in

the Matriculation Examination only after six years' notice, in the F.A. after eight years' notice, and in the B.A. after ten years' notice. Though that sounds a long way off, some change will be necessary as soon as the recommendation takes effect at least in the lower classes, and it is necessary to consider why the Commission propose such a sweeping measure and how it will be received by the public. Here is the reason for the change in the Commission's own words:—

"In the first place if the alternative of a Vernacular language is permitted, many students will lose the benefit to be derived from a knowledge of a classical language containing a rich literature and embodying a record of the thought and action of one or other of the great races of mankind. There is no Indian Vernacular, according to the strongest advocate of the alternative study of vernacular languages, that is as rich in literature as Sanskrit. In the second place the amount of mental training which the study of a classical language ensures is much greater than that required for the study of a Vernacular language. Thirdly, the study of classical languages is of the utmost importance for the improvement of their allied Vernaculars. That the Vernacular languages and literature have advanced more rapidly in Bengal and Bombay than in Madras appears to us to afford a striking illustration of this principle."

These propositions will meet with unqualified acceptance at the hands of those who know both Sanskrit and a Vernacular. It is not quite accurate to describe the Dravidian languages as 'allied vernaculars' in relation to Sanskrit in the philological sense; but Dravidian literature has owed so much in the past to Sanskrit that no scholarship in the Dravidian languages is good for much without a fair knowledge at first hand of the original source. Tamil is certainly the best developed of the Vernaculars, and its vocabulary is the least indebted to Sanskrit; but even in its case, all the standard works in common use, excepting a very few classics, owe their inspiration to Sanskrit, and bear marks of their origin in their very diction. Dravidian scholars, however, will not allow all this, and even if they allow it, will not draw from it the legitimate inference that, were it only as a means of enriching the Vernaculars, Sanskrit scholarship is of immense importance. Non-Brahmans too will complain that they are at a disadvantage in com-

parison with Brahmins in regard to the study of Sanskrit. It is only to be expected therefore that this innovation will be bitterly assailed both in the Senate and elsewhere, and apathy, pride and prejudice will combine to defeat it.

On the teaching of Sanskrit the Commission make some wise remarks which educational authorities here need to ponder. Both the Department and Managers of institutions have much to account for in the shabby treatment accorded to the Vernaculars and Sanskrit in respect of the provision made for teaching them.

"With regard to the teaching of Sanskrit, we have to remark that the teachers, whether Europeans or Indians, ought to have a critical knowledge of the subject and should be acquainted with Western methods of study. This matter requires special attention in the Madras Presidency. We have noticed that the teachers of Sanskrit are not always regarded as on a level with, and are usually paid at a lower rate than, the professors of other subjects. This circumstance is to be regretted and could not exist if only properly trained teachers were employed."

Nor can the Commission be accused of indifference to the Vernaculars, for the growth and development of which they have with great solicitude made express provision. In the M. A. course the Vernaculars must be combined with English, and in all stages of the B. A. course, Vernacular composition must be one of the subjects of examination, though it need not be taught. Indirectly too the University encourages the Vernaculars where the candidates are required to translate into them. University funds may well be devoted to the establishment of professorships in the Vernacular languages. The Commissioners add:

"Unless, however, a good training in the Vernacular is given in the schools, no effort of the University will avail. At present, the subject is frequently neglected, and the teaching is relegated to ill-paid and incompetent instructors. As in the case of English, so in the case of the Vernaculars, better teachers are a primary need. Every boy should, on the completion of his school course, be required to pass an examination severe enough to show that he has a knowledge of his own language sufficient to enable him to express himself with ease and propriety."

It is here that one is unable to follow the Commission. It is a pity that, contrary to Mr. Banerjee's contention, they kept High School education rigidly out of their consideration, or we should

know what exactly they mean. Apparently they contemplate the systematic and regular teaching of the Vernacular languages in High School classes, though the University will not examine its candidates therein. The Commissioners hope that the School Final Examination will include these languages; and one of their suggestions is that the University may admit a candidate who passes in the School Final Examination and in any special subjects not included in its curriculum. If so, he will have to study a classical language for the Matriculation and a Vernacular for the School Final. Anyhow the matter is not free from doubt, and the Vernacular masters need not take alarm too early.

The unlucky private student seems to have greatly exercised the Commissioners. He is to be carefully excluded hereafter from the Matriculation Examination unless he produces a certificate, "which need not be given unless special circumstances justify it, from the Educational Inspector of the circle in which he lives, to the effect that as the result of a test examination held by the Inspector himself or of the ordinary test examination of a High School, it seems reasonably probable that he will pass the examination." In the case of the Intermediate Examination or that for the B.A. or B. Sc., he may be admitted only "by a special order of the Senate, to be justified by reasons to be recorded in each case at the time of making the order." Madras, Bombay, and the Punjab are blamed for their tenderness towards the private candidate. One cannot see why so much fuss should be made about him or why the thunder of legislation should be invoked on his head. It looks ridiculous that every private candidate for the Matriculation should trouble such a hard-worked officer as an Inspector for a certificate and that the Senate should solemnly resolve that for such and such reasons So-and-So be or be not admitted as a private candidate for the Intermediate Examination.

Under the head of Examinations many little

points claim attention. The Matriculation candidate must be 15 years old at the time of his examination, and if he fails three times, should not, except for special reasons, be allowed to reappear. There are to be no text books in English for the Matriculation Examination—a decision which must cause bitter disappointment to many an earnest teacher of English in High School classes. The marks of each candidate may be communicated to him for a small fee. There ought to be an alphabetical list of the successful candidates in each class for the not very convincing reason that "any order of merit which takes account only of the marks obtained must be misleading; the candidates who take certain subjects can put together more marks than other candidates (it may be equally meritorious) who take up other subjects." The Madras system of examination in the B.A. course in three compartments is condemned, for "a man who passes in all his subjects at one time gives better evidence of the soundness of his general education than the man who can only pass in the subjects taken separately." It is hoped that the Senate of our University will decline to change the present system for such a lame reason.

The example of Madras is commended to the other Universities in the provision that it has made for a degree in teaching. They are further advised to provide suitable courses of lectures for teachers. The Teachers' College, Saidapet, is to serve as a model for similar institutions elsewhere.

Space can be found for only one other point. Speaking in unfavourable terms of the command of English of the ordinary undergraduate, the Commissioners make the remark: "Even those who have acquired considerable facility in speaking and composition are, as we ourselves had many occasions of observing, lamentably deficient in pronunciation." The native teacher in High Schools is generally responsible for this, and to remedy this, the Commissioners make the following observation which may be commended to all Managers of High Schools:

"We venture to express the opinion that it is desirable that the study of English should not be permitted to be begun till a boy can be expected to understand what he is being taught in that language, that the classes at schools should be of manageable size, and that teachers, whose mother tongue is not English, should be passed through a Training College where they may be tested in expression and elocution by an Englishman before they are given certificates to teach."

V. S. SRINIVASAN.

VILLAGE ASSOCIATIONS.

IT has of late become the fashion to raise the cry of the impoverishment of India; each man attempts to investigate the causes either of the decadence or of the mere poverty of the ryot—according as his particular trend of thought starts with the assumption that the ryot is poorer or merely poor. And having diagnosed the disease each physician is ready with his favourite prescription which is to cure the sick man unaided. Mr. Romesh Dutt is still hankering after that divine Permanent Settlement given which we may laugh at famines, unless indeed the facts and figures of Local Governments and the logic of the Viceroy have finally convinced him that Permanent Settlements and famines be many miles apart. Another remedy is a general reduction of all, and chiefly of ryotwari, assessments. A third suggestion is that the cost of education be not borne by local taxation. Again the drain of wealth to England is wholly responsible for a famine according to another writer. Finally with a remark that sweeps aside all such causes and remedies, the Indian Agriculturist pins its faith to the diffusion of Agricultural knowledge by means of simply written pamphlets which shall embody the wisdom so learnedly poured forth by Agricultural experts in the form of bulletins and at present pigeonholed in the offices of the Collector, the District Surgeon and the Forest Officer.

It is not from want of faith that I have omitted to mention the institution of Agricultural Banks amongst these remedies. On the contrary Agricultural Banks when established will probably do more than all to relieve the poverty and indebtedness of the people. It is rather because they are a remedy apart that I have given them a separate place—an institution that lies not wholly within the sphere of politics, an importation from the West that has not grown up with the life of the people. It would be an easy task to dilate on the proofs that

none of these theories solves the whole problem. The demonstration would be out of place in this paper and the refutation has been reserved for abler hands than mine. The idea that the remedy lies in introducing Permanent Settlements or in reducing land assessments is fallacious, inasmuch as, such remedies only relieve the pressure from outside without touching the root of the disease. The probability is that were the land tax reduced, the people would not spend less, and that the surplus would go not to raise the standard of comfort but to swell the indulgence in useless luxury. The problem in fact is not financial but social and the remedy lies not in diverting the stream of wealth from the coffers of the Government into the pockets of the money lenders but in educating the people to habits of thrift and enterprise; the change, if I may use a bold metaphor, must be *chemical* and not mechanical.

It is from this point of view that the remedies of Agricultural Banks and of the diffusion of Agricultural knowledge are most deserving of attention. Each of them deals with the masses from the social point of view; neither regards the problem as one between the state and the people. The one presupposes a certain amount of thrift; the other a certain amount of education. They are in fact dependent on almost the same principles though each might exist independently of the other. For if thrift is essential to the working of Agricultural Banks, some education is assumed to have produced the thrifty habit; if education is needed for the assimilation of Agricultural knowledge, thrift has to supply the necessary capital for its due application. The ryot has learned to endure adversity and to abuse prosperity. He has to learn how to use prosperity so as to conquer adversity.

But the underlying principle which will make Agricultural Banks feasible and which alone will turn Agricultural knowledge to the best advantage is the spirit of combination. I am far from claiming that this is the panacea for all ills; that ryots,

who have learned to combine, need not watch the skies of June as anxiously as before, or that the individual members of a combination will not find it as necessary as ever to celebrate a wedding or a funeral in such a manner as to leave them in debt for years afterwards. But putting aside the question of the ryot and the state as one which does not really touch the disease, it will be found that the principle of combination enters not only into the remedies proposed but also affects the people in almost every possible economic direction.

I do not for an instant pretend that combination is by itself that all-saving remedy which alone is efficacious. I have no desire to set up a nostrum to the exclusion of all other remedies; on the other hand I believe firmly that Agricultural Banks are probably the most practical and effectual form of the various principles of self help, thrift and of that mutual help which I am here calling combination. Those may believe in the reduction of assessments, who think that the disorder is rather an ulcer to be cut out, than a disease which pervades the system. But while I allow that the institution of Agricultural Banks and the diffusion of Agricultural knowledge each contributes largely to the relief of poverty, the principle of combination may be active in many other ways not connected with these unless indirectly.

"I must have two, you know—one to fetch and one to carry" says the Red King in *Through the Looking Glass*. That is the essential—"I must have at least two." The most primitive form of Agricultural combination is probably the contract, whereby two men agree to cultivate a piece of land jointly. But too often this is a mere family arrangement, the senior partner being simply the managing member. In Tanjore, where land is sometimes held on what is called "Samudayam" tenure, that is to say that it is common to the village, though not exempt from land tax, a form of combination might be thought to appear, but the true spirit is too often absent for it appeared that in the Delta of the Kaveri the majority of land sales for

artears of revenue were on these very Samudayam lands and were due not by any means to the poverty of the ryots or to the rigour of the land revenue system but to the disputes of the villagers as to the various quota which each should contribute.

In no part of the daily life and his daily work is the ryot required to act in co-operation with his neighbour more than in the irrigation of the lands. And as long as there is abundance of water, there is no doubt a certain amount of give and take in field to field distribution. Even this however is often used by the rich to oppress the poor and the village Ahab by stopping or diverting a water course is able to make himself master of Naboth's vineyard. But in water distribution also the real spirit of combination is wanting for the moment the least hint of scarcity arises it is "every man for himself and the Devil take the hindmost," the result being that the Devil generally manages to secure a fair harvest.

Now it is just at the time of scarcity of water that the spirit of combination is most necessary to the ryot. No complicated syndicate or company is called for. It is quite clear that it is to the interest of the community at large to secure the greatest amount of crop for the water they can get. The usual plan is for each to scramble for the water, each village against the next and each ryot against his neighbour. The net result is that no one gets any crop to speak of. It is as though a number of men were disputing for a milch cow and ended by pulling off her head and her legs and her tail. The component parts of the cow are there but her value which lies in her milk is gone. But if under a village association it was decided to cultivate certain lands only, the other ryots abandoning their own lands for the common good; if by the laws of such an association each ryot who contributed towards the cultivation was entitled to a share, all would get something. There would no doubt be details to arrange. It would be necessary to exclude all these, who had not sacrificed their

claim to water for the sake of the lands cultivated. The number of shareholders would have to be limited. But as yet the ryot far from combining in such an association has not yet learnt to form a company of two. If A holds 3 acres and B holds 2 acres, each will try and cultivate the whole, though by B relinquishing his 2 acres and going into temporary partnership with A, a splendid crop might be secured and both might profit. From this first elementary form of agricultural unity would be evolved the syndicate for taking up waste lands. Many waste lands need reclamation and the ordinary ryot has neither capital nor labour at his command. The ryot with Rs. 50 or 100 in hand can do nothing. But 20, 30, or 50 ryots each contributing their Rs. 100 or if you will their small quota every year would soon bring into cultivation large tracts which are now abandoned to scrub jungle or else left to the enterprise of the single individual, too often an absentee landlord. From this stage we gradually rise through the combined purchase or storage of manure, the acquisition of agricultural stock and the breeding of superior cattle until we arrive at the complex banking system. I speak here of the system as a whole—the system which has its highest exposition in the Banks of England or of France and I do not mean to imply a constant transition a *minori ad majus*. It is quite possible that the Agricultural Bank may be less complex than some of the associations I have suggested.

Finally we come to the great Trading Companies. It is neither more nor less than the principle of combination that enables the great European firms to stifle and finally extinguish native enterprise in the rural towns. There are very few native firms at least in Southern India that can afford to take up the whole Abkari contract of a District—still less of several Districts—from the Government. How many native firms can establish a monopoly in Kerosine oil, or in Manchester Cottons? What native firm can establish branches in every seaport town from Calcutta to Karachi? The sole idea

that the native trader has of combination is the coalition of two brothers, of cousins, of near relations or perhaps in a limited sense of one or two partners. The result is certain. The capital of lakhs must in the end swamp the capital of thousands only.

The difficulties in the way of the establishment of such village associations are numerous. The caste system which undoubtedly has its advantages cannot by its most devoted admirers be called immaculate and it is probable that it would stand in the way. The Brahmin inamdar—the absentee landlord—would disdain to throw in his lot with the peasant proprietor, the sudras, the slaves of the soil who live and work in the village. The well-to-do Vaisya or sudra would try to exclude from the benefits of the association the unfortunate panchama, who has risen by his own exertions to be a tenant or even a landed proprietor instead of remaining a mere field labourer. And it is to be feared that whatever might be the rules framed by the committee of such an association, means would too often be found to assert the great law that 'Might is Right' and the weakest must succumb—"the loser pays." It is said of Political Economy that it is a selfish Science, though what it does is simply to take human passions as it finds them and to deduce certain results. In like manner let it not be imputed that I speak maliciously. I set down facts as most people have found them. Self interest again is the first law and every man of the people has been brought up to regard his interest as opposed to his neighbours. Instead of regarding himself as the branch of a tree which equally with other branches draws its nourishment from the common stock, he regards the whole matter as a mathematical problem—"the more for you the less for me." It may be objected that that is what happens all the world over and that it is known by the name of competition. The difference is that the ryot is unable to see when his interests coincide with those of his fellows. A third difficulty is that the very

idea of combination is foreign to the Hindu. It is true that he has the system of the undivided family, but this confines operations to the family alone and even so leads often to disputes. It is true he knows the system of the joint patta but more often than not, the joint owners have each their own share of the land, well defined and recognised among themselves. It is true above all that the Nidhi or Chit Funds exist but these seem to be largely confined to a few enterprising societies in the South. To the ordinary ryot however an association managed by Directors and supported by funds, which the shareholders contribute, is not only unfamiliar but is probably unknown.

A still greater obstacle must be recognised in the ignorance of the people—ignorance not merely of syndicates and banking systems but of reading and writing. If the ryots can hardly be expected to invest their savings—when they have been induced to collect any savings—in banks the constitution of which is a thing unknown to them, the difficulty is enormously increased when we come to consider that they would have to invest without having the least check over accounts, in blind confidence in the Village Directors. To borrow money from the village money lender is easy; when the day of reckoning comes, some educated friend will perhaps check the not very elaborate accounts and the enormous sum demanded as interest will be paid without a murmur. But the ryot will not cast his bread upon the waters with a mere hope of finding it after many days and the possibility of never finding it at all.

But the crowning difficulty is the mistrust that the villagers have of one another. No one can doubt this and no one can wonder at it who knows the various deceits that are practised—the false evidence that has been bought for a few annas or is given to oblige a friend—the case the fabric of which has arisen on the most flimsy foundation—the document which to defraud a creditor conveys to another land or houses in name only. Even the Karnam bound round as he is by the checks neces-

sary for the security of the public revenue has not won the full confidence of his fellow villagers and comes in often truly but often undeservedly for his share of charges of malversation.

But if such mistrust exists where the officers of Government are restrained and the ryots are secured by all possible checks, what would be the case where the sole administrators of the village funds would be the directors of the village syndicate? Apart from this mistrust the system of the village communities seems admirably fitted for these associations. They are small and therefore the scheme would not be complex: the members are all familiar to one another and therefore the subscribers would not be dealing with unknown and untried strangers. They are accustomed to collections made for sundry purposes—taxes levied by voluntary or forced contribution from the community—collections made for the repair of a temple for the digging of a tank and sometimes it is whispered for purposes which are neither religious nor philanthropic but wholly servile. Yet no one asks whether the whole amount thus contributed has been laid upon the altar of the Goddess, has been handed over to the public body or has been absorbed by the rapacious individual for whose worship, use or propitiation it was originally intended. In these cases however the contribution is not continuing. The result is apparent to all. The temple is repaired; the tank is dug—perhaps or at any rate the public confidence in public bodies is sufficient; the rapacious individual is dormant or may be even actively favourable. But an association must from the nature of the case be continuing and a single breach of faith might have disastrous effects in destroying the confidence of villagers for ever.

Yet such schemes need not be despaired of. A certain dislike of the merely speculative in practical matters leads me to inquire how best this could be furthered. It is absurd to expect them to spring into sudden life as the Goddess of wisdom sprang fully armed from the Head of Zeus. On

the contrary they must be treated as tender nurslings fed not with the strong meat of enthusiasm but with the sincere milk of endeavour—not crammed with scientific complications but nurtured on simplicity. The beginning would be very small. Some enterprising ryot might be induced to join with two or three of the fellows in demonstrating the value of unity to the villagers.

A difficulty would no doubt be felt in the distribution of profits and this would especially be the case in any association for the use of water. As far as possible the ryots owning the lowest lands would naturally prefer to keep the whole profits to themselves and the owners of high lands could not fairly expect to participate since they sacrifice very little. It is rather the moral force of the rules binding the society that would operate in such cases. There would be no combination on a large scale but two or three members taught by the rules, would join together in the manner I have already illustrated. In the case of waste or pasture land, of purchase of manure or of breeding stock the problem is simplified, each ryot would become a shareholder in proportion to his contribution—which would give him the right to appropriate his share of the profits, to graze so many cattle, or to utilize the breeding stock as the case might be.

The main difficulty would be the check on each association. No doubt we might introduce the District Association—a kind of parent society from which the others would flow. Indeed it is probable that any movement of the kind contemplated would have its origin amongst the better educated and the more enlightened landed gentry of the Towns. But a District Association means money. An establishment must be kept up. Clerks at least and auditors would be necessary and this would be contrary to the whole principle of the mutual self-help which as far as possible ought to avoid expenditure on the organisation of societies and on establishment for their up-keep. Still expenditure there would be and the object to be aimed at therefore is the reduction of such expenditure to a

minimum. The object of the society would be the improvement and reclamation of land, the purchase and storage of manure, the combined utilization of water in times of scarcity, the digging of wells and tanks for irrigation purposes and the improvement of the breed of cattle.

A small subscription, of eight annas a year from each ryot, would if the societies ever grew and flourished, be sufficient not only to bind the District (or if necessary the Taluk) together into one society but to enable the District (or Taluk) Association to maintain a sufficient staff of clerks and auditors and to distribute in pamphlets written in simple village language the scientific knowledge that is now so learnedly poured forth in the pages of the Indian Agriculturists or of Agricultural Ledger.

It is not the purpose of this paper to present a scheme ready cut and dried; nor, if it were the purpose, would space allow. The idea may seem to many to be Utopian. Be it so; if it be Utopian there can be no harm in indulging the fancy—
“*Cantabit vacuus coram latrone Viator.*”

S. P. RICE.

WELL IRRIGATION.

IN June 1900, I contributed a short article to this Review on the very important subject of “Our Underground Water-supply” in which I endeavoured to show that the information available regarding the ultimate disposal of the rainfall in India was very limited, and that consequently it was desirable to scientifically study the question with a view to utilizing a much larger proportion of the subterranean water for irrigation than is at present done. As a preliminary step it was obvious that more powerful and cheaper methods of lifting water than by water-lifts worked by cattle were essential and I showed that the oil engine when employed to pump from a well yielding half a cubic foot per second or 190 gallons per minute was considerably cheaper and infinitely

more convenient than any form of water-lift worked by means of animal-power.

The importance of well irrigation was fully recognized by the Irrigation Commission and a large amount of evidence was tendered by many witnesses. The report of the Commission may be expected to contain practically a complete summary of all the information available and will serve as a starting point for further investigations. Funds have already been placed at the disposal of the Madras Government for experimental work in this direction and during the next few years there is no doubt that a serious effort will be made to render available for agriculture a very large quantity of the water which now runs to waste beneath the surface of the earth.

In the Madras Presidency there are more than 600,000 wells from which water is drawn for irrigation and the area of cultivated land partially or entirely dependent upon them is about 1,500,000 acres. Each well on the average supplies water to only $2\frac{1}{2}$ acres of land and naturally the question arises—is full use made of the stores of water below the soil? In many cases, possibly in a numerical majority of the cases, there is little doubt that all the available supply is utilized but in what may perhaps be a comparatively insignificant minority of wells the available supply is enormously greater than the present demand and vast quantities of water remain unused. It must be within the personal knowledge of most people that there are wells which yield a good supply of water throughout the year and never dry up even in years of severe drought. Such wells should be examined and attempts should be made to pump them dry. Many wells are only made use of to the extent that tanks would be if they were only provided with high level sluices through which the upper water in the tank and that only could pass through the bund into the irrigation channels. In the south of India well-sinking is a very primitive business and the better the supply of water, generally the shallower the well. A ryot wants a well and having selected a spot which he thinks

suitable, he sets to work and either sinks a hollow cylinder of brick work into the ground till water in sufficient quantity to satisfy his expectations is reached, or he excavates a big rectangular hole in the disintegrated rock which forms the sub-soil and goes on deepening it till the inflow of water is greater than can be dealt with by the modest water-lifting appliances at his disposal. Year after year in the hot weather when the water level is low, he may increase the depth by adding to the number of mholes on the well and in this way many valuable water-yielding wells have been sunk. Let us suppose however that the unwatering of the well in the hot weather is accomplished by a powerful engine and pump, the work of excavating will be easy and the depth may be rapidly increased till either the inflow is greater than can be dealt with or practical considerations clearly indicate that it is not worth while to go any deeper. For water to flow into a well the level in the well must be lower than in the sub-soil and the greater the difference in level the greater is the force tending to make the water flow into the well. But the lower the level in the well the greater is the amount of work which has to be done to raise the water above the surface and ryots prefer numerous shallow wells to a few deep ones. The number of cattle employed in lifting water is enormous and it is improbable that any great extension of well cultivation can take place under the present system for lack of animal power to do the necessary work of extracting the water. A ryot must have cattle and while the crops are growing they can be profitably employed in raising water, but directly he has to keep cattle specially for the purpose, well irrigation becomes expensive and unprofitable. A pair of good serviceable bullocks in constant work cannot be kept for less than Rs. 20 per month including the wages of a driver and the work they do can be far more cheaply performed by a good oil engine or steam engine. But these machines even when of the smallest size practicable are far too big for the work of drawing water from ordi-

nary wells and they can only be employed when the conditions are unusual in respect to the volume of water to be obtained from a well. A $3\frac{1}{2}$ horse power oil engine, which is the smallest size it is advisable to employ, can be worked for 16 hours a day at a cost of $2\frac{1}{2}$ rupees and will do as much work in lifting water as 10 pairs of good bullocks costing Rs. 200 a month. Allowing for repairs, depreciation and interest I have no hesitation in stating that the cost of pumping by an oil engine of this size, driving a centrifugal pump, is almost exactly one-half what it is when bullocks are used, provided only that there is sufficient work to keep the engine fully employed.

Before developing further the idea of employing oil engines for well irrigation I propose to briefly describe an experiment now in progress. About 6 miles from Chingleput is a small pariah settlement founded by Mr. Andrew of the Free Church of Scotland Mission. About 50 acres of land are under cultivation and the crops are watered by 5 wells which have been sunk since the settlement was strated about eight years ago. Greatly interested in the question of well irrigation Mr. Andrew offered to allow me to conduct experiments on his wells and with the assistance of funds placed at my disposal by the Madras Government at the instance of the Chief Engineer for Irrigation, Colonel Smart, R. E., I have been able to put to the test of practical working the idea of using oil engines. I selected what was supposed to be the best well on the settlement and at the beginning of March I tried to unwater it by working a Persian wheel continuously night and day by means of relays of bullocks. I soon found it desirable to increase the pumping power and accordingly a picottah was set up and worked by gangs of coolies night and day. The draught on the well amounted to about 2,500 gallons per hour or allowing for irregularities to about fifty to sixty thousand gallons per day. This resulted in a gradual lowering of the water level till the depression amounted to

$5\frac{1}{2}$ feet when the level became stationary and the inflow was equal to the amount withdrawn. Arrangements were then made with Messrs. Massey & Co., of Madras to supply a $3\frac{1}{2}$ horse-power Hornsby Ackroyd oil engine and a 3-inch centrifugal pump, the combination being capable of lifting 170 gallons of water per minute to a height of 30 feet. Pumping was started at the end of March and in a few hours the well was emptied. An attempt was then made to deepen the well and a central hole 15 feet in diameter was sunk 7 feet when hard rock was met with. Adits were then run horizontally from the bottom of the well through the partially dis-integrated rock. Four were started, but two of them had to be given up before they had been run out 10 feet on account of boulders, the other two were carried outwards about 25 feet and 20 feet respectively, and the percolation through their sides forms the main source of inflow to the well. The cost of the adits was Re. 1 per foot run and they were stopped as soon as the rate for excavating them rose above that amount. The result of the operations was to increase the inflow from 40 to 66 gallons per minute, or from 60,000 to nearly 100,000 gallons per day. Pumping has continued all through the hot weather and the inflow has somewhat decreased. On the 20th July it was measured and found to be about 67,000 gallons per day. With the advent of the rains it is expected that the inflow will materially increase but how much is quite uncertain. At present the engine runs nine hours a day, in three periods of three hours each. When pumping ceases, the flow of water accumulates in the well and at the beginning of each working interval there is about 5 feet of water to be removed. The average lift is 25 feet and the engine consumes about 2 gallons of oil per day costing As. 12. The wages of the drivers are Rs. 12 per month, so that the total cost of running the engine including the cost of stores amounts to only Rs. 40 per month. Later on with longer running hours it may amount to Rs. 60 per month

and for this sum 50 acres of dry cultivation will be fully supplied with water. The capital outlay on the engine and pump and the cost of fixing the same amounted to Rs. 2,500 and an allowance of Rs. 40 per month for interest, repairs and depreciation will be a very liberal provision, making the total monthly charges Rs. 100 when running and about Rs. 50 when standing. Assuming that water is required for eight months in the year, the total cost of this engine and pump will be Rs. 1,000 per annum. For this sum 50 acres of dry crop will be watered and I am inclined to think that possibly, with the supply of water to be expected, the area may be much larger but only a continuance of the experiment over several years will enable this to be definitely determined. The conditions under which this experiment is being conducted are by no means favourable and much better results could be obtained in many places. The well yields a fair supply of water, but there are undoubtedly very many which would give double the supply. The engine and pump worked to their maximum capacity would raise 250,000 gallons a day to a height of 30 feet, or nearly half a cubic foot per second, sufficient for from 100 to 125 acres of dry cultivation. Under such circumstances, the cost of supplying water to the land would not amount to more than Rs. 12 per acre per annum. This is a result so very satisfactory that when it becomes known and fully realized it ought to lead to an immense employment of these modern methods of lifting water.

It is well known to engineers that the cost of generating a unit of power rapidly decreases as the amount of power generated by a single engine increases. In view, therefore, of the fact that the great majority of wells are unable to yield sufficient water to give adequate employment to even the smallest engines, it has occurred to me that possibly large tracts of land could be supplied with water from wells by electrically driven centrifugal pumps, the power being generated at a central

station and distributed by a net work of overhead conductors. From an engineering point of view the problem is a comparatively simple one and its practicability simply depends upon the cost of the installation both as regards capital outlay and working expenses. I have therefore obtained estimates of the cost of the machinery from well-known firms in England and with the information thus obtained I have worked out two imaginary schemes assuming conditions that could be realized in many places in this Presidency. The first scheme is a comparatively small one for the irrigation of five or six hundred acres. All the land is assumed to be situated within a rectangle 2 miles long and 1 mile wide. The water-supply is derived from twelve wells scattered over the area. Each well may be assumed to cost Rs. 500 though under favourable conditions, they would not cost more than half this amount as the depth is not to exceed 35 feet. The water would be lifted by a 3" centrifugal pump driven by a direct coupled $3\frac{1}{2}$ horse-power electromotor, the pump and motor complete and fixed in the well costing Rs. 750. The current would be supplied from a generating station situated near the centre of the area and 5 miles of overhead conductors costing about Rs. 650 per mile, would be required for distributing the energy. The generating station might be supplied with a steam engine and boiler costing Rs. 4,000 or with an oil engine of the same power costing Rs. 3,600, driving a dynamo costing Rs. 1,800 which would give out a current of 27 amperes at 550 volts pressure equivalent to 20 electrical horse-power and capable of driving 4 of the pumps under full load or 5 under the average load which would come upon them. Each pump would discharge 150 gallons per minute, so that with 5 pumps going the supply of water would be 2 cubic feet per second or sufficient for 500 acres of land. The method of working would be to run a motor till the well was emptied and then shut off the current and allow it to fill up by percolation, whilst the current was employed in driving

another motor in another well. With 5 motors running out of 12, water would be drawn from each well for an average of 10 hours per day. Including all items, the total cost of the installation would be as follows :—

	Rs.
Engine house	4,000
Engine and dynamo	5,400
Switch board, etc.	500
12 Wells at 500/	6,000
12 Pumps and motors at 750/	9,000
5 Miles of line at 650/ per mile	3,250
Contingencies 10 %	2,850

Total.. 31,000

The working expenses would be as follows:—

	Rs.
Repairs, interest and depreciation at 12½ %	3,875
Oil at As. 6 per gallon, at 2 gallons per hour for 5,000 hours	3,750
Superintendence and labour Rs. 130 per mensem for 12 months	1,560
Miscellaneous stores	200

Total.. 9,385

That is, the cost of watering 500 acres of land averages Rs. 19 per acre per annum, the land being under cultivation practically the whole time. This is far too high a charge for ordinary wet crops, but it is by no means excessive for garden cultivation, such as is practised in agriculturally advanced districts like Coimbatore. For projects of this kind to pay, it naturally follows that when all the resources of modern engineering are devoted to the problem of supplying water and a considerable outlay in machinery and plant is involved, the agricultural operations must be of a similar character and the cultivators must be prepared to put capital and labour into their fields to obtain the best possible results. The selection and rotation of crops must be judicious, the lands must be well manured and in general terms what is known as *intense* cultivation must be practised.

Let us now consider the possibilities of operating on a much larger scale, and for this purpose we will assume that there is a strip of land about 10 miles long and from one to two miles wide lying alongside a river channel. Such a piece of country actually exists on the Palar not far from Chingleput. The land near the river will probably be at a slightly higher level than further away, and as the wells will draw their water-supply mainly from the subterranean flow of the river they will all be situated near the river bank. The wells will be sunk near the river bank at an average distance apart of one-fourth of a mile. In all there will be 40 such wells and the power station be situated in the middle, with 20 wells on either side, the most distant well being 4½ miles off. Assuming that the average inflow into each well is half a cubic foot per second and that the average lift is 30 feet the total actual work which will have to be done by the pumps will be 68 horse-power. To determine the power required at the generating station, we may make the following assumptions regarding the efficiency of each part of the system of power distribution :—

Efficiency of dynamo	90 per cent.
Do. transmission	75 "
Do. motor	80 "
Do. pump	70 "

Combined efficiency of whole system 38 per cent. so that the engines will have to furnish 180 horse-power. The following estimate of the cost of the plant may be taken as approximately accurate :—

	Rs.
Engines	54,000
Dynamo	9,000
Engine house	7,500
Switch board and fittings	2,000
40 wells at 500 each	20,000
40 motors and pumps	30,000
Overhead conductors 10 miles at 1,500 a mile	15,000
Contingencies 10 per cent.	13,700

Total.. 1,51,200

The working expenses on an assumed running of 5,000 hours per annum would be—

	Rs.
Fuel for engines. . . .	20,000
Superintendence and labour . .	3,600
Repairs, interest and depreciation at 12½ per cent. . .	18,900

Total.. 42,500

The area that could be irrigated would be between four and five thousand acres and the annual charge for pumping would amount to about Rs. 11 per acre. The case considered is perhaps a favourable one, but without doubt a careful examination of the country would reveal many such, and it is eminently desirable that advantage should be taken of the natural facilities where such, exist.

So far we have only considered the question of well irrigation when the power is supplied by oil or steam engines, but it is open to us to go one step further and consider what use can be made of water-power which in certain districts is available in vast quantities throughout the greater part of the year. Without going into details, one or two general facts may be noted which tend to show that there is a wide field open to engineers in India in utilizing the power of water-falls to lift-water from wells over very extended areas. For industrial operations a continuous supply of water all the year through is generally essential, and expensive storage works have to be constructed to tide over the period of scarcity of water during the hot months of the year. When the water-power is to be used for pumping water from wells the failure of the supply of power during the hot weather is of little or no importance as the cultivation can be so arranged that the land requires no water at that season. Water power can therefore be provided at a considerably less expense for such schemes as we are now discussing, and if it be a profitable undertaking to generate power at the Cauvery falls and carry it over 90 miles to the Kolar mines under onerous conditions regarding failure of the supply, it is obvious that it will be still more profitable to utilize water-power under the much

less exacting conditions which would prevail in irrigation pumping.

The report of the committee on utilization of water-power at Periyar stated that electric energy could be delivered in Madura 80 miles away for Rs. 22-8-0. per horse-power per annum and in Madras for double that sum of Rs. 45. Assuming that these figures are approximately correct, it would appear to be perfectly practicable to lift water from wells with electric energy over the greater part of the South of India. The minimum power, available at the Periyar during ten months of the year is officially stated to be 30,000 horse-power, and there is reason to suppose that the efficiency of the whole system of generation, transmission and utilization would be one-third, so that 10,000 horse-power would be the work actually accounted for by the water lifted. On an average lift of 40 feet this would be equivalent to 2,200 cubic feet per second or sufficient for 550,000 acres of land. At Rs. 10 per acre for annual charges this would amount to 55 lakhs and would permit of a capital expenditure of at least 3 crores of rupees, probably a much larger sum than would actually be needed.

I have drawn attention to the possibilities attendant on the utilization of water-power for pumping purposes because ultimately I think they will be realized on an exceedingly big scale, but that day is yet distant and the business of immediate practical importance is the smaller schemes which I have outlined herein. They involve but small expenditure, each one started and proving successful adds to the store of information we must gather about underground water and places us in a position to ensure that in subsequent undertakings the risk of failure will be a constantly diminishing quantity. The exceeding simplicity of working characteristic of good oil engines and their remarkable economy in the matter of fuel has changed the conditions under which water lifting can be undertaken. It is necessary to reconsider the position and demonstrate by practical working that the primitive appliances of the ryot can be superseded by methods of water lifting so greatly superior as to open out entirely new possibilities regarding the utilization of subterranean water.

ALFRED CHATTERTON

KANIKKARS.*

THE Kanikkars are a class of Hill tribes or mountaineers living in the southern mountains of Travancore (in the chain of the Western Ghats). They correspond to the *Muthuvers* (population 1077 as per Census of 1891) and the Malai Aryans (4809 Do), living in the northern mountains of the same chain. These tribes are sometimes known as Malai Arasars (Tamil for Hill Kings). This is in keeping with the tradition narrated by one Mallan Kani to me that they were to the Hills what the Rajahs are to the low country and the fishermen are to the seaboard—*Malai Arasars* as against the other two, *Nattu Arasars* (low country kings) and *Kudal Arasars* (sea kings). The Kanikkars are found in large numbers in the Neyyatinkarai and Neduvangaud Taluqs of the Trivandrum Division and in a few of the hilly Taluqs of the Southern and Quilon Divisions. Their names and numbers do not appear separately in the last Census Report, an omission which it is hoped will be supplied in the next Census, but they are apparently included under *Velanmars* (literally Tamil for spearmen) a name inaccurately applied to them along with others properly so called, but disclaimed and repudiated by the Kanikkars themselves. *Velanmars* returned in the last Census as consisting of so large a number as 17,143, must however include besides *Velanmars proper*, the Kanikkars, the Ulladars a hunting tribe, the Vedars found at the foot of the Hills rather than in the higher regions, Hill Pandarams and other forest tribes, not specifically mentioned in the Report.

The Kanikkars allege that they are the descendants of two Hill kings Sreerangan and Veerappen

* Literally means in Tamil hereditary proprietors of Kani or land.

This article was sent to us by the author a few months before his sudden death last year. We take this opportunity to pay a tribute to the memory of the writer one of the most conscientious and capable of the native officials of Travancore.—Ed. I. R.

who migrated from Pandi beyond the Agasthiarkoodam Hill and never returned to their low country homes. It seems certain that the original Kanikkars must have come from the low country on either side, whether driven to the hills by persecution or prompted by a voluntary spirit of enterprise. Settled on the hills for ages and living there from time immemorial they have come to be regarded as aborigines of the country.

The Kanikkars are of strong physique, dark in appearance and generally of active habits. They wear a small cloth (Mundu) hanging in front from the waist but are almost naked otherwise. The women, according to the custom of the tribe, do not leave the Kanis, though they work along with the men there. The cloths of the women hang from their loins all round lower still and cover them better. Both men and women grow long hair over the head and tie it up in a knot behind. Both wear on the neck numerous strings of red beads and of rings made of shells, the garlands hanging down to the abdomen in the case of the women. The men wear earrings of brass or silver. The women wear several bracelets in each hand mostly of brass and one or two of iron, leaden rings in the lobe of the ear, and a number of brass rings on the fingers. Both men and women bathe almost daily, unlike the great unwashed Todas of the Nilgiris, but their gain in cleanliness is little, as they change their cloth only once a year.

The men always bear suspended on one of their shoulders a cloth-bag containing two or more partitions in one of which they keep their *Vilangupetti* or box containing betel nut, tobacco and chunam. They carry too suspending on one or both their shoulders a cane basket where they secure their day's crop of grain, or roots or any other food obtained by them. They attach to their waist strings or cloth, a bill hook, and a knife and hold a bow and arrows partially slung on their shoulders, and often a stick in their hand.

They speak Tamil with an admixture of Malayalam. The language is more Tamil than Malayalam

in the south and more Malayalam than Tamil in the north, but they pronounce both the languages badly. They have not taken kindly to education. A school opened by the Sirkar for their special benefit and tried for a long time at Malayadi Kani had to be shut up as it failed to attract students. They could never tell their ages correctly nor could they count, the cleverest of them, beyond ten at a time. Whenever Kanikkars from the different Kanis or settlements in the different hills have to be gathered together for a common meeting or for going together elsewhere on a common purpose, a messenger amongst them carries from one Kani to another the message with a knot of fibres of creepers, which serves as a symbol of a call for such meeting. The knot of fibre is passed on from one Kani to another till the required assembly is secured. It is thus I secured my Kanikkars to present them to Their Excellencies. It is thus they communicate with each other to go in a group to His Highness the Maha Rajah which they do occasionally once in a year or two. The Maha Rajas always receive them kindly, accepting the nuzzur they offer in the shape of (1) the bamboo plantain with large though few fruits (2) a parcel of Muthucheri Hill paddy seed (3) bamboo joints holding honey of different varieties and (4) Virukachattam or a parcel of civet. The customary modes of Court address and the prescribed etiquette are alike unknown to and unused by these unsophisticated Hill tribes, and the Maha Rajas, pleased with their simplicity and unaffected homage, reward them with presents of cloth, money, salt and tobacco, with which they return satisfied to their jungle homes.

Each Kani or settlement of Kanikkars consists of a number of huts to accommodate those composing the clan of that village, a good number of the huts being on the floor, a few near the tops of trees, called the *Anamadams* or (Elephant huts) meant as a refuge from elephants, tigers etc., built on a platform of sticks, high up on tall trees, with a

ladder for reaching the same. Sometimes a single bamboo, with the shoots on the sides cut off, does duty for the ladder. The walls and roofs of these small dwellings are made of reeds, bamboos and their leaves and stems of the elephant reed (*Melocanna Rheedie*).

No match boxes have invaded the Kanis yet. These hill men strike fire by the friction of two pieces of the wood called (*Miruththa Maram*) (*Isora Corylifolia*)—a method of ignition curiously enough considered pure by Brahmins too for producing sacrificial fires.

The Kanikkars go to the neighbouring forests and gathering such natural products as *Neduran Nooran*, *Nooli*, and *Kavala* roots, boil and eat them. In the months of Medam and Edavom, they gather honey from clefts of rocks or from branches of trees and bring the same for sale in *Thenkombu* or bamboo joints adapted for holding it. Three varieties of honey, *Chiruthen*, *Perunthen*, and *Thoduthen*, are thus collected by them. They also collect and supply to the Sirkar or its contractors for a small *Kudivaram* or remuneration such minor forest produce, as wild cardamoms, dammer or *Kunthrikam*, wax and wild ginger, besides honey. They entrap the wild boar and tiger in *Dalis* or traps constructed of timber resting on a spring contact with which lets fall a crushing weight on the beast. They are good at bamboo, rattan and reed wicker-work or basket work of different kinds.

With their primitive weapons, the bow and arrows they do some hunting and bring game for their food. They have no scruples as to eating any variety of wild animals, short of the unpalatable tiger, but would not eat the low country cow or bull. The hill men have no objection to take food cooked by Sudras, but seem to object to eat with Shanars, Eluvars or still lower castes.

Each Kani is under the patriarchal control of a Moottu Kani or Chief Kanikkar whose position is often hereditary in the same family. He guides the clan of Kanikkars in his village or settlement, from start to finish, in all operations. An auspicious

cious day, generally Friday, is selected by him in the months of Vrichikom, Dhanoo and Makarom for the whole party to set out to clear the wood. The felled wood is allowed to dry for about a month and then it is set fire to. The head man or Moottukani parcels out the land next, amongst the Kanikkars, who thereupon run a line of huts, with *Anamadams* here and there for their accommodation. In the months of Medam, Meenom and Edavom seed is sown, also on a Friday on each occasion. In the months of Mithunom and Karkadagom, wedding is done. In Chingom and Kanni a bumper harvest is reaped. They do not plough nor till but they scrape the ground with a stick called *Thotakambu*.

The varieties of cereals grown by them are, Hill paddy such as Kanathava, Pinappukkadu, Chennallu, Vellavalam, and Muthucheri and Millet, Ragi, Thenai and pulses. Of roots and tubers, they grow Tapioca, Valli or sweet potatoes and the like. Of plantains, they grow several varieties including the bamboo plantain. They grow also ganja and tobacco for their own consumption. The land gets exhausted under this system of cultivation which takes much from but gives nothing back to the soil, there being no manuring and the manurial constituents of the virgin soils having been all used up. After one or two years, the land is given up. The whole clan under the leadership of the Moottukanni choose another forest land and shift cultivation and settlement thereto in the same order in which the processes were gone through in connection with the last Kani. They do not go a great distance off, but at this rate, they keep up constantly shifting all through the hills, under a system of migratory agriculture and settlement, which, however easy and remunerative at first for them, tells a great deal permanently on valuable State forests, while it does not train them in rationally economic agriculture nor give them a fixed home.

The harvest time of the Kanikkars is just the opportunity availed of by Mahomedan and other

dealers and artisans for imposing upon and taking too much out of them for beads, cloths, ornaments (with little gold and much brass), bill hooks and their repairs.

Tobacco smoking and spirituous drinks are recent imported evils from which Kanikkars are now suffering.

They refuse to be vaccinated. A single case of Small-pox is enough to scare all so as to make them flee from their village, leaving the patient almost unattended.

Boys marry at and after 16, girls beyond 12. The bridegroom offers the present of a cloth to the mother of the bride, besides one to the bride and a present of $5\frac{1}{2}$ fanams in the case of a bride who has attained age and $7\frac{1}{2}$ fanams in the case of a bride who has not, to the uncle or father-in-law four Chuckrams of which go to the father of the bride. A two chuckram silver Thali is tied by the bridegroom direct in the case of a girl of the latter kind and through his sister to one of the former. On the marriage day the feast is held in the bride's father's house and on the next in the bridegroom's.

Where there is any property (there is no room for immoveable property under their migratory method), the inheritance is by the nephew, but the Kanikkar gives to his children what he likes in his life-time—generally half is given to the sons and half to the Seshakaren. The marriage bond is generally strong during the life-time of the wedded couple. The Kanikkars bury and do not burn their dead. They observe 7 days' death pollution.

The Kanikkars do not drug themselves and have no faith in medicine. The medicine-man and the priest are one and the same individual who by his *Chattu* and *Pattu*, or mantrams and songs, works himself up into a state of inspiration and excitement, and by his passes and touches as well as incantations and oracular pronouncements is supposed to cure the patient. Faith-cure is, according to their account, doing wonders amongst them.

The Kanikkars feel also the existence of a higher power or a God, whom they do not worship in the

form of a specially made image, but to whom they offer sacrifice of plantain fruits and rice flour on an even raised ground, in the months of Kanni and Meenum and generally on occasions of sowing, harvest or domestic events. They worship also Sylvan deities set up by other classes in shrines, or God in the manifested form of huge rocks and kavus or forests.

The Kanikkar is thus still, if not in the fetish, in the primitive stage of worship—probably the first stage in the religious evolution of all races. Ethically he is much an undefiled being so far—however unclean he may be from a physical point of view. He is simple and truthful—virtues which a pessimistic traveller prophesied to me would desert him, the moment he is drawn into the vortex or whirlpool of modern civilization. He is now the picture of contentment and wishes only to be let alone.

The Rev. Mr. Mateer deprecates that Christian ideas of soul and hell have made no impression on this tribe. He says "The Kanikkars have not much idea of the soul or immortality. When asked, they say, 'who can tell?'". Some with whom we conversed said they knew nothing of a hell or of the wicked going there". And yet what horrified the zealous Missionary in the Kanikkar is often the scientist's position no less than the savage's and that species of *Heathen* will have first to be won for Christ before his dream of christianizing all Travancore is realized!

Mr. Honiss says of the Kanikkars "The fate of the hill kings is rather sad. For ages past they have boasted of being the undisputed lords of the primeval forests. The elephant and tiger were their only foes, but with snares and traps they could hold their own against their enemies. But they could not resist the onward march of a superior race. The planter approaches them in a peaceable way, offering wages for their hire but demanding as his right the land he has purchased. The proud men of the woods decline to herd with coolies and work like common people. As soon as the planter's axe is heard, the Hill kings pack their traps and desert their homes to establish themselves in another valley. In this way they have been driven from hill to hill and valley to valley, until some have found now a safe resting place in the dense jungles of the lowlands of Travancore. If the planter wishes to penetrate some unexplored jungle or cut a path in some out of the way place, the hill men are ready to assist and it is the universal testimony that they are more faithful to their engagement than their more civilized brethren from the plains."

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LIFE AND TIMES OF SANKARA.

AS far as it is known," says a recent American writer speaking of the great Athenian Sage, "the life of Socrates in its merely outward bodily incident may be told in a paragraph." Such, it is to be feared, is also the case with Sankara whose life it is here purposed to sketch. Few of the facts of his life can be narrated with certainty, not even the time and place of his birth.

Yet the need for a reliable and historic account of Sankara is being felt more and more, for the Advaita philosophy, of which he was the first and foremost expounder and which has since his time enjoyed a wide and more or less steady popularity throughout India, has latterly had additional importance given to it by the Vedantic studies of Western scholars, European and American, and by the spread of the Theosophical movement. The comparative method is being applied to it and its merit tested. This intelligent study of his works has naturally aroused a desire to ascertain the facts of the 'external' life of the Teacher, and monographs on some fact or facts connected therewith have been written in a true historic spirit. As yet however but few historic memoirs exist of the *life and times of Sankara*, written with the object of showing him just as he was, and with a view to either benefit the learned or inform the 'commons.' The object of the present sketch is accordingly to gather together for the benefit of the general reader what could be found in a few *Sankaravijias* or 'triumphs of Sankara' which have come down to us, (and which, together with one or two other sources noted below, must, in the absence of better ones, pass for 'original authorities') and in the monographs or stray bits of information available in the recent writings of archæologists.

These 'original authorities' are (1) The *Sankara Vijias* of *Madhuvacharya*, *Anandagiri*, *Chidvilasa* and *Svami Sadananda* arranged perhaps in chronological order; (2) a chapter inserted in the ninth *Amsa* of *Skanda Purana*; and (3) *Madhva Vijia* and *Manimanjari*, both by Pandit *Narayanacharya*, a hostile *Madhva* writer. And of recent writers, Wilson, Max Muller, and Telang may be mentioned as the most important. A few words regarding the relative merits of these several sources are needed to prevent misconceptions and explain the attitude of the present writer towards some of them. Much fighting against shadows will be avoided

if readers will kindly remember that the standpoint taken here is throughout *historical* and that exception taken to any portion of this sketch will have to be taken from that standpoint.

Madhavacharya, whose work is placed first in the list, is the well-known *Vidyaranya*, sometime minister for Hakka and Bakka, Kings of Vijayanagar and later on Priest at the Sringeri Mutt. This fact settles the time when this Sankara Vijia was written, whether Vidyaranya wrote it himself or caused it to be done by some assistant; for, considered as a literary effort, it is to be feared that, matter and manner taken together, the work does not reflect much credit on the scholarship and judgment of that great sage and commentator of the Vedas. It also settles, what is quite clear from internal evidence, that it was meant to be a counterblast to the Mādhwā writings under class (3). Of the other Sankara Vijias, it need only be said that they all show traces of relatively later origin, though Wilson claims for Anandagiri age as well as trustworthiness. This, however Telang has shown to be groundless and untenable. All of them make very dull reading, often silly and occasionally indecent.

The chapter of Skandapurana has been mentioned only to be dismissed without a word of comment. The Purana itself is the recognised repository of all sorts of lies, pious and impious, ever invented by the children of men, and the portion referring to Sankara is evidently a trash inserted very recently by some hand but little exercised in Sanskrit Composition.

Mādhwā Vijia and Manimanjari included under class (3) are very interesting for historic purposes. In his sketch of the Life of Mādhwā, the writer of this pamphlet has endeavoured to show that these works were the fruit of the persecution which that Guru had received from the then incumbents of the Sringeri Mutt and that he had on that account been forced to claim a divine origin for that strife, in doing which he called himself Bhima and made Sankara, whose successors had been troubling him, an avatar of a Rakshasa, Maniman by name, mentioned in the Mahabharata. Pandit Narayana, one of the followers of Mādhwā, in the next generation, worked these hints up together with some traditions current in Malabar about Sankara, and composed these two works of his, with intent to discredit Sankara's origin and his doctrines.

It need hardly be said that all these works were written either to cry the Teacher up or down, according as the writer happened to be friend or enemy of the Guru, and to show more of his superhuman nature than his doings as a historic person and great man. It does not appear as if there

were records earlier than any of these, but the prefatory verses of Madhava's book would seem to show that there were several. For he says, "I gather in this book the essence of the old Sankaravijaya. And may the great Commentator accept these laudatory verses of mine, though he has received praises from so many old poets." If this is a statement of facts, these old works have not come down to us; perhaps some of them may see the light hereafter. At present we have merely to use Madhava's book as the earliest available. His 'Essence' is of such exquisite kind that for purposes of biography, perhaps more than 2500 of his 2851 verses must be set down as worse than useless and absolutely *non-essential*! And if this is the case with this Sankaravijia, which is not merely the earliest, but the best of the group, it follows that of the rest, the less said, the better. For, but for the Hobson's choice under which we labour, few of us should care to trouble our heads about the existence of this mass of dull reading passing for Sanskrit verse.

Of recent notes or essays, it may be said at once that they are all marked by a sense of historic reasoning and truthseeking. And if some of the theories advanced have been proved or are on the high road to being proved untenable, the fault is due to the scantiness of the material each writer had had to work with. Archaeology is progressing and new discoveries must necessarily modify old positions, though no slur be cast on those who had to work without a knowledge of them.

The life of Sankara like that of every other great man, must begin with the description of the state of things in the midst of which he was born and brought up, for "each man, poet or philosopher, inhales much before he exhales." Accordingly we have to consider the state of Hinduism at the time of the advent of this teacher and just pass in rapid review the stages it had gone through before reaching that particular state. In other words, we have to condense the fortunes of Hinduism during several centuries in a paragraph or two—a very difficult task truly and therefore necessarily imperfect. But there is no helping it.

It is enough to begin with the period, whenever it was, when Vedic sacrifices were the order of the day. Then there were sacrifices and sacrifices. In the words of the poet "kings had milked the earth for sacrifices and Indra, in return, the heavens to help harvests on." There was the sacrifice of the horse, there was the sacrifice of the goat, of man and of all other things imaginable. And sacrifices had increased not merely in number but also in elaboration of ritual. Rewards were

promised in a most reckless manner to masters of sacrifices, mainly Kshatria princes. When, however, after the performance of some of them, the promised rewards were not forthcoming, and when accordingly princes were wroth, the inventors had to find apologies, silly and unconvincing. For instance, some one's performance had defeated itself because he had chanted a single Vedic verse or word with the wrong accent. स्वहिन्द्रशत्रुर्वर्धयेति ।

Here absolutely no notice was taken of the spirit in which the chanting was done. And when some princes tried to perform one hundred Horse-sacrifices and win the post of Indra for themselves, the legend of Nahusha was invented to scare them away. Here no explanation was forthcoming as to why the permanent incumbent should resign his position, his wife and his substance in favour of the new-comer, or how two or more candidates seeking it at the same time were to be rewarded.

Under such circumstances therefore discontent was slowly growing and making itself manifest. It is doubtful if human sacrifices were ever favoured in a large scale, but if they were, they quickly disappeared, and the story of *Sunasepha* mentioned in the Ramayana shows that even at that time, it had become rare and discredited. The opponents of animal sacrifices were not merely Kshatrias, but also the more sensible among the Brahmins, who had begun to sing the praises of contemplation and superior moral virtues, as against the extravagances of the Brahmanas in favour of sacrifices. The Upanishads or "the top-knots of the Vedas" as they are termed, are almost everywhere of this line of thought, and one glorious hymn, chanted to this day by the orthodox Smartha Brahmin before breaking his fast, formed the shadow which the coming event had cast before. It is known as *आत्मयज्ञ* (self-sacrifice,) and is well worthy of translation, but it being pretty long, a sample must suffice for our present purpose:— "And of the sacrifice performed by the master who has understood these truths, the soul is the performer; the heart, the seat of sacrificial fire; sensual desires, the ghee; *anger the sacrificial lamb*; contemplation, fire; the period of sacrifice, as long as life lasts; what is eaten, is sacrificial rice; what is drunk, soma drink; and death is the bath concluding the ceremony!"

This spirit fostered by men of thought and encouraged by men of action over a long period, at length culminated in the teaching of Gauthama, the Buddha. Most Hindus have learned to regard this teacher an avatar of Vishnu, though strangely enough he is said to have come down not to raise the low and the fallen, which

is the mission of all the other avatars of Vishnu, but to delude some pious devotees of Siva. Many others who have learned to look upon him with better and more rational feelings yet seem to regard him an alien and his faith absolutely alien to India. This, it need hardly be pointed out, is gross misreading of history. The teaching of Gauthama, a member of a Rajput clan, was but a fully developed form of the thoughts scattered among the Upanishads, with the freshness and vigour of his own originality and zeal added to them. The rapid spread of Buddhism among all classes shows that he had 'set to music' just 'the tune which had been haunting millions of ears.' Long after his departure and after his inclusion in the Hindu Pantheon, Buddha's real service to mankind is described by Jayadeva in one of his popular songs, to have been the abolition of animal sacrifices. "O Thou of merciful heart! Thou didst condemn the slaughter of lambs at sacrifices though enjoined by *Srutis*, while Thou hadst taken the shape of Buddha." This crusade against the killing of animals, the use of the vernaculars instead of Sanskrit, the cutting at the root principle of exclusive castes and the organisation of bands of monks and nuns to spread the faith—all these points explain the electric speed at which Buddhism spread everywhere.

Starting under such favourable conditions however, this religion, like every other institution ever started by human agency silently went on changing from century to century and during its later life, became corrupt in many ways. Gross idolatry in practice (c.f. Hiouen T'sang), formal atheism in doctrine, a regular army of monks and nuns everywhere eating up the substance of the industrious and charged with the worst evils of mediaeval monasticism, were only a few of its bad features. Its enemies, the Brahmins, whose stronghold had been Western India all along, were not slow to take advantage of them and calumniate the Buddhists, while close contact for centuries had led to many silent adaptations by them of Buddhist doctrines and practices. At length the time came for them to use the logic and rhetoric of Buddhists against themselves,—and they began to do it.

Of these neo-Hindu Missionaries, Kumarila Bhatta is evidently the most renowned. Tradition connects him with a fierce and relentless persecution of Buddhists of which more will be said later on. Here it is enough to note that his peculiar faith was what is known as *Karma Marga*, that is, salvation by the sole means of this faithful performance of *Karmas* or daily and periodical rites enjoined by the Vedas and the Smritis. His success, whatever it was, was due, not certainly

to the advocacy of animal sacrifices, whose date had most assuredly fled, and to which mere lip-service was all that anybody could do, but to the revival of the harmless rites made more impressive and dazzling in imitation of the Buddhists. By the way, it may be noted that these rites, which were by Bhatta and the school to which he belonged held up to public admiration because they were capable of bringing good fruit, each after its kind, were soon followed by other rites whose avowed object was doing good to oneself by doing evil to others or to mankind—in other words Black Magic of some kind or other. Malabar is to this day the stronghold of the art of ruining man in this manner, and Chidvilasa calls it मोहनस्तेभनाद्यानां विद्यानामङ्कुरस्थलम् ॥

Bhatta's was only one of the many sects that had been formed at various times and scattered fearfully over the land. There were *Bhairavas*, *Saktas*, *Ganapathys*, with many sub-divisions among each and the name of these sects was really legion. They had all based their faiths, however, on the Vedas; particular texts or passages torn from the context and wildly interpreted, formed their scripture and several had begun to claim greater authority for Puranas or Smritis on which they had based their belief, than that claimed for the Vedas. And, what was of infinitely greater importance, the *practices* of most of the sects were simply abominable and terrible, killing of good and pious men, hard drinking, eating of stale meat, indecencies, mentionable and otherwise, having all become sanctified in the name of religion and spread over many and vast provinces of this land. And each sect was intolerant of every other, and quarrelling and mob-rule had begun to disturb the peace of the land, no less than occasional persecution by rulers. A certain weariness seemed to have come over men and a hankering after some kind of mutual accommodation and general peace. To mould the whole continent on the same and rigorously scientific pattern in point of doctrine and practice, was evidently out of question; the obstacles, physical, racial and linguistic, have at all times proved too strong and too numerous for any one reformer or even a host of reformers. Union and friendliness were, possible only when a common basis could be so fashioned as to be comprehensive and able to allow for large differences, though of secondary importance philosophically. This was the kind of unifying influence that seemed to be urgently needed. And, more important than this from another point of view, a thorough and even drastic over-hauling was needed as regards *practice*. Sin had been too long identified with religion and

it was high time it were chased away. It was given to Sankara to do both and, one is bound to say, with a very large measure of success.

An obscure village named Kaladi (*the foot*), six miles to the east of Alvai, a station on the Cochinchin-Shoranur line, is traditionally mentioned as the birth place of Sankara. It is not undisputed, for Anandagiri places it at Chithambaram. He is however alone in this statement. Further, the writer of *Manimanjari* is content to give it as Kaladi and his testimony in such matters must be held peculiarly valuable for very obvious reasons. And there is likewise a curious practice at the temple of Narayana of Badari in the Himalayan region. The officiating priest there has been a Nambudri from Malabar for a long period and the memory of no man runneth to a period when it was otherwise. And as tradition assigns the founding of this temple to Sankara, the presence of the Nambudri there can easily be explained by kinship to the founder. We have therefore to believe that Sankara belonged to Malabar and to the Nambudri class of Brahmins.

The Agraharam of Kaladi is said to have been founded by a neighbouring chief, who is called Rajasekhara, if that is a proper name. This chief dreamed, as thousands of other men have done, that Siva had become manifest, in the neighbourhood of his capital, in a self-projecting Linga. And he accordingly caused a temple to be built for the God and founded an Agraharam or settlement of Brahmins for the service of the temple. Among these was one of the name of Vidyadhiraja, evidently a title indicating his learning. He had an only son of the name of Siva Guru. The boy went through the usual course of instruction open in those days to Brahmin boys and having completed his studies, married at the proper age and settled down as a householder. For a long time the couple were childless and invoked Siva. At length, as a consequence of the plan agreed upon at Kailas between Siva and the gods who had called there to learn how He was going to revive Hinduism, the god was pleased to bless them and the wife of Siva Guru became big with child.

It would be a marvel if, in the case of this Guru, as in the case of most other Gurus, there had been nothing extraordinary about his birth. Accordingly, in addition to the blessing noted just now, we have several other versions to consider in regard to the circumstances of the Guru's birth and parentage. Madhava adds that before blessing Sivaguru's wife (she had fallen asleep just then), the God asked her whether she would have a number of dunces and ruffians for children or an only wise son, but destined to be short-lived. She

wisely chose the latter and had Sankara for her reward. Clearly this part of the miracle is an afterthought. In due course the son was born and the friends and relatives of Sivaguru were glad and there was rejoicing all about him.

Anandagiri however relates the story in an entirely different manner. We have seen that he locates the place of Sankara's nativity at Chithambaram. We are told that there was a pious Brahmin couple at this place and that after a time the husband retired to a neighbouring forest renouncing the world; that the wife continued for a long time to serve the Lord of Chithambaram and, as a reward of her devotion, the Lord was pleased to make her conceive in some mysterious way. And the issue was Sankara. This friend is apparently one from whom Sankara might well pray to be saved! The story was evidently got up to magnify the Guru's nature as an avatar of Siva, and as it has no other support it may be dismissed as a worthless and mischievous invention of some foolish admirer of the teacher.

There is another version of it which we have to examine before we pass on. The writer of Manimanjari states that a widow of Kāḷadi went astray and begot a male child and this was Sankara. This plain statement, however, is based on a tradition still current in some parts of Malabar, that a young widow of Kāḷadi once went to the temple of Siva along with other girls of her own age and, as some among them prayed for children, she also did so, perhaps in jest and by way of tempting God, that the Lord granted her request and that she bore Sankara in consequence. The difficulties which Sankara experienced later on in doing funeral rites to his mother (vide *infra*,) would also seem to confirm the suspicions about his birth, though the objections of his relatives were merely against a Sanyasin attempting to violate the rules of his order.

We have no materials to enable us, at this distance of time, to assert authoritatively one way or the other or be positive about it. We can see however that Madhava's book makes absolutely no mention whatever of these damaging traditions. If he had had any knowledge of or belief in them, he would surely not have left them unexplained, for he has sought to explain away the other calumnies against Sankara—for instance, the incidents relating to Bharati, mentioned later on. Further there is a very strong argument to prove all this talk about suspicious birth unfounded. Both at the time of his renunciation and in connection with her funeral rites, we shall see that Sankara discovered extraordinary affection for his mother, in the latter case even going the length of offending the whole

circle of his orthodox relations to satisfy his mother's wishes. Now as it has been a maxim with the Aryan Hindus to regard the unchaste mother, the indebted father and the idiotic son as among the worst enemies of a man, Sankara would hardly have cared to suffer all the miseries that he did on his mother's account, if she had not deserved that amount of sacrifice and filial love—especially when it was unnecessary. Accordingly we may ascribe the whole of this tradition to the efforts of some misguided disciples and admirers of Sankara to exalt their Guru, or to those of his enemies.

If these are the difficulties in the ascertainment of the place and circumstances of Sankara's birth, infinitely greater are those that we have to face in trying to ascertain the time of his birth. The exact year of his birth is perhaps lost to us for ever, for the horoscope given in Madhava's book is a mere imitation of Rama's and is therefore worthless.* The Scingeri Mutt, undoubtedly of the Guru's founding, has a list of his successors, but unhappily an imperfect list, for besides other errors, it assigns to Sureswaracharya, the immediate successor of the Guru, a period of 700 years or more! Still as the time of this monk's birth is placed at the close of the eighth century according to Vikrama Saka, if we make some allowances for some body's carelessness herein, it is easy perhaps to reconcile small discrepancies and take 788 A.D., as the year of the Guru's birth, as Max Muller does. Two additional reasons would also seem to support this. Madhava's book locates the Buddhists in Kashmir or more generally in the Himalayan regions and Magadha does not seem to have figured in Sankara's days as the stronghold of Buddhism or even as a province where the Buddhists were numerous, though in the minority. Now as Hsien Tsang had found in the middle of the seventh century that Magadha was still dominantly Buddhist under Silāditya II. a period of about 150 years is not too long for this change that had come over this province. Again, if the date assigned by the late professor Sundaram Pillay to Sambanda could be accepted as the right and proper date, and if the allusion said to be found in one of Sankara's devotional songs is a real reference to the Tamil Saint, then the year that we have accepted has every probability of being the right date. As it is, however, it is only provisional.

Telang however very ably pleads that Sankara

* Two views are generally held as the probable time of the Guru's advent; namely, 788 A.D., which is accepted by one school of thinkers and the close of the 6th century which is held by the other. It need hardly be observed that nothing *conclusive* has been arrived at by either party, nor is it likely to be until better data are available.

must have been born somewhere towards the close of the sixth century, from a remarkable allusion, in his Sutra Bhashya to a Purna Varma, who was a Buddhist King of Magadha at about that time. To the present writer, however, it seems to need additional and more forcible evidence before it can be said to have been proved. For the present, then, we proceed on the supposition that 788 A.D. indicates the year of Sankara's birth.

The boy's early years were spent in the usual way. He was initiated into the mysteries of the alphabet at the proper time and soon discovered uncommon intelligence and grasp. In his 7th year he was about to be invested with the sacred string when his father died. His mother had it done later and sent him to learn the Vedas and the Vedangas—from whom, we are not told. As has been said of several others, it has been said of Sankara that he had learned all the Vedas and Shastras in two or three years—by the eighth year, he had finished his course! And the same writer who tells us this piece of news also tells us, almost in the same breath, that after his return from the Guru's home, where he had been staying for some years, fathers who had daughters to marry offered to get him married. Now it is absolutely unheard of among Nambudris, at any time in their history, that a boy was married about his eighth year. One or the other of these statements therefore has to be rejected and so we may regard the age as having been given in a careless manner or with intent to add to the Guru's divinity. We shall therefore reject it and say that Sankara had now attained the marriageable age and had just come back to his own house, having by this time completed his study of the Shastras and given, we need not doubt, promise of some kind of future for himself. A hankering after miracles—an unhealthy hankering,—it must be said without reserve—lies at the bottom of all such anecdotes and these we must consistently reject. We may thank God that in the case of this Guru, at all events, these crutches are absolutely unnecessary—we have the greatest of his miracles, the commentaries and other works, and they can satisfy the most ardent miracle-seekers.

Sankara's student life being over, proposals of marriage began to be seriously entertained and his mother was busy consulting astrologers about horoscopes of girls. One day about this time we are told that the Sage Agastya and other sages called at Sankara's house and the talk turning on his age, 'Agastya' reminded the mother of her choice and told her that her son was destined to die at an early age. We may perhaps take this statement to mean that the astrologers that were consulted as

regards marriage were of opinion that an enemy sat at the House of Life in his horoscope—a familiar enough occurrence in India. So many marriages have been prevented by such considerations. Perhaps also we are to understand that this discovery hastened the plan that Sankara had formed within himself to renounce and become a Sanyasin, towards which by nature he had been inclined. Anyhow the talk of marriage was soon followed up by a serious proposal of his to renounce. The mother as is usual in similar cases bewailed her sad fate, her loneliness and the like during life and the absence of any one else to attend to her funeral rites after death. (The reader perhaps needs reminding that a Sanyasin having renounced the world and severed all the ties binding him to it, is prohibited by the Shastras from humbling himself before men (parents inclusive) or doing funeral rites to his parents—both which prohibitions we shall see Sankara set at naught in the case of his mother). He assured his mother, however, that, Sanyasin or no Sanyasin, he would always be ready to attend to her spiritual needs. Even then his mother was not pacified, and Sankara was revolving within himself some plan of effecting his purpose.

One day mother and son went to have their bath at the river which was then in floods and as he was having his plunge, he felt or feigned he felt, that a crocodile was pulling him by the foot and at once he shouted in a loud voice, "I am gone, dear mother, the crocodile is dragging me down. Let me have the satisfaction of dying a Sanyasin and give me the permission needed. I shall then 'die in peace!'" To this account Madhava adds that the crocodile had promised to let him alone if he renounced—which is, of course, a miracle. The mother in this crisis could not hesitate and so at once called him Sanyasin. We might imagine it to have occurred in any way we please. Perhaps there was a real peril and Sankara meant what he said and secured what is known as *आप्तन्यसन* (renouncing in a crisis.) Perhaps he feigned it to force his mother's hands and saw no harm in doing it. However it was, he emerged from the water a Sanyasin and having repeated his promise to his mother and having placed her under the care of his relatives, to whom he likewise assigned all his substance, he left Kaladi in search of a Guru with a view to get himself *formally* initiated into holy orders, the mother following him with tearful eyes.

Western India had always been, as has been noted, the stronghold of Hinduism. Certain localities had become recognised as seats of learning and sanctified in the names of some great Rishis. The several branches of learning had had their

recognised founders and 'traditional' leaders. In other words, the Vedānta Sūtras of Bādarāyana, or the Karma Sūtras of Jaimini or other Sūtras of that kind, being necessarily brief and requiring much reading between the lines, had been taken up by particular 'Schools' in various parts of the country and the traditional interpretations put upon them carefully treasured up and handed down by oral teaching.

Of such seats of learning, Sankara was led to choose one 'on the bank of the Narmada'—evidently a hermitage, occupied at this time by a great Yati of the name of Govind. His predecessor, immediate or a little remote, was Gaudapada of Sankhya commentary fame. Hardly anything more has come down to us of Govind, than that he taught Sankara the germs of his philosophy. But as we find that in every work that Sankara has left behind he subscribes himself reverentially as the disciple of Sri Govind Bhagavatpada, we might take it to prove the great esteem that Sankara had for this teacher and his obligations to him. Sankara also pays his respects to his Parama Guru—i.e., the teacher's teacher—Gaudapada, thus making it certain that the latter had just preceded Govind.

The description of the first meeting of Govind and his pupil is given both by Madhava and Chithvilasa. The former is perhaps at his worst here for he makes Sankara go to the hermitage, cast himself at the Yati's feet, and being asked who he was, answer, "Master, I am neither fire, nor air, nor earth, nor water—none of these, but the Supreme Spirit shining underneath phenomena." In other words, he talks Advaita long before he learns it—absurd in conception, absurd in taste. Chithvilasa is infinitely more sensible; only he locates the hermitage in the Himalayas. Sankara goes to Govind and pays his respects—and being asked who he was, says, "I am the son of Sivaguru, a Brahmin of Kerala. My father died in my childhood and I was brought up by my mother. I have had a fair course in the Śāstras," and he goes on to give the crocodile incident already noted and requests that His Holiness might be pleased to formally invest him with the robe of Sanyasin.

Satisfied with this account, 'Govinda Yati,' received this pupil with pleasure and, having made him go through the formalities needed, began to teach him the philosophy he had learned of Gaudapada—among other things the art of interpreting the Vedānta Sūtras according to traditional methods. How long the course lasted we cannot tell, but it must have been fairly long, (for soon after he leaves the hermitage and goes to Benares, he receives pupils himself and begins composing his

works). At length having taught him all that he could, Govind desired Sankara to go to Benares first and afterwards form one of the peripatetic teachers of Hinduism, in whom post-Buddhistic India abounded. Sankara accordingly went to Benares and in that centre of learning soon distinguished himself in dialectics and philosophy and began to attract pupils from various quarters. Among these was a young Brahmin from the land of the Cholas, i.e., from Chithambaram or some part of Tanjore. He was admitted as a novice with the name of Padmapada and his devotion to the Guru was unbounded. He therefore became specially endeared to him, which having roused some impatience in the minds of other pupils, Sankara on one occasion put his faith to the test in their presence by making him walk across the Ganges as on solid ground, which he did because he had had the mustard seed of faith which moves mountains. We shall have more instances of his faith later on.

The order in which he wrote his works is not known to us, but judging from analogy, it is clear he must have attempted small things before beginning great ones. There is a tradition that he began with commenting on the thousand names of Vishnu (Vishnu Sahasranamam,) and there is nothing improbable in it. Many of the small things given in the appendix must have been done before he proceeded to comment on the chief Upanishads, or the Gita or finally the Vedānta Sūtras. The commentaries of the Gita are said to discover some amount of impatience in regard to those who object to an unmarried young man turning out Sanyasin—evidently the expression of personal feelings. There were likewise many original monographs composed at intervals and on particular occasions. One such might be noted as a sample. Sankara was going along the street with his pupils one day to have his noon bath at the Ganges. A Chandala with his dogs was passing by him, when the pupils shouted to ask him to clear the road, as Brahmins do in Malabar to this day. The man however turned about and asked the Guru how he might consistently teach Advaitism and practise such foolish observances. The Guru was struck by the answer and its pertinency to the occasion called forth five slokas forming "*Manesha Panchaka*" every one of which ends, "He who has learned to look on phenomena in this light is my true Guru, be he Chandala or the twice-born. This is my conviction." How the Chandala was able to make that kind of answer we are not told, but all difficulties are avoided by calling him Siva in disguise. Another and one of the most popular of the Guru's minor songs is said to have had a similar origin—It is a poem of

about 12 slokas whose refrain is, "Worship Govinda, worship Govinda, worship Govinda, O fool! When thou art face to face with Death at the appointed time, it is not the repetition of an aphorism of grammar that is going to save thee." A student of grammar grinding at some aphorism of Panini evidently inspired this song.

In this manner Sankara lived for several years either at Benares or at Badari at times, to be free from bustle and disturbance, composing his works, submitting them to the wise men of those parts and developing them in the light of criticisms or controversies. These wise men are called Vyasa, Jaimini and Gaudapada—in other words either the reputed founders of each school of thought or the greatest names in connection therewith. 'Vyasa' on one occasion came to Sankara's abode as an old man and learning from his pupils that he had commented on the Sūtras of his making, engaged in a disputation with him on some knotty point for a whole week, till Padmapada finding neither side disposed to give way, interposed and prayed that the Avatars of Vishnu and Siva might desist and give the world peace! This, being interpreted, can only mean that there was a good deal of wrangling over Sankara's commentaries of the Vedānta Sūtras and that he was occasionally forced to give up his earlier positions and meet opponents half way.

The most important works of the Guru having thus been finished and tested and taught to his pupils, Sankara left Benares accompanied by a large number of his pupils and with a large collection of books. Chithvilasa mentions the name of a *Rathan Singh* as the then chief of Benares who on this occasion pressed Sankara to stay on with him, while the Guru excused himself saying that he had been asked to be a peripatetic and that therefore his mission lay over the whole of India. Perhaps the name is absolutely valueless for historical purposes. But, aware as we are of the high value of royal patrons in those days, we need not doubt that Sankara's fame and influence began to spread, by reason of the help rendered by local chiefs everywhere, no less than by his own worth, for Anandagiri and Chithvilasa both agree in saying that the teacher had had while on tour the usual paraphernalia of the Heads of Mutts displayed in our own days, and these could only have been gifts made by kings. So, helped by the local chief of Benares all along, whether his name was Ram Singh or Rathan Singh, Sankara now began his triumphal progress, aged most assuredly over twenty five, if our supposition is correct regarding the age at the time of renunciation. He first stopped at Prayag (Allahabad) and bathed at the confluence

of the Jamna and the Ganges and in his prayers remembered his parents. After these rites were formally gone through, he was resting under the shade of trees with his disciples, when news was brought to him that the great Bhatta, the champion of the Karmic School and the extirpator of North Indian Buddhism was about to commit himself to flames!

This is the place to speak at some length of the life and doings of this strange personage. We have already had occasion to glance at his work, but we shall now pause to take a fuller view of him. He is believed to have been an Assamese Brahmin and the following account is an adaptation of what Madhava says of him. He went through the course open to every Brahmin boy. But either his own inclinations or motives such as influenced missionaries like Father Beschi, led him soon to put on the guise of a Buddhist and learn the Buddhistic theology from a great Doctor. For a time all went on well, but on one occasion this teacher in his discourse happened to be more severe than usual in ridiculing the divinity and the sanctity of the Vedas, so much so that Bhatta shed tears at it. His brother students who were all Buddhists, noted it and inferred that he must be a heretic. Accordingly 'these pious people who had taken on themselves the vow never to harm animal life,' resolved that rather than suffer him to go abroad in possession of their secrets and the weak points of their theology and turn their logic against themselves, they would have done with him. So one night as they were all chatting on the terrace of the Guru's house, they contrived to trip him up, and down fell Bhatta exclaiming in a loud voice, "If it be true that the Vedas form true Revelation, may they save me from harm!" The result was that he reached the ground safe enough; having lost but one of his eyes, which we are told was due to the doubt implied in, 'If it be true!' Whatever the means, Bhatta escaped with his life and from that moment conceived the most uncompromising hatred against the faithless sect and made it his mission to carry on ruthless war against them. We have however only an account of what he did at the court of King Sudhanvan, though incidentally we are told he had visited many other courts before arriving there. Here ensued a mighty dispute between the Buddhistic Doctors of the king (who was himself a Buddhist) and Bhatta, the uproar and din caused by which reached the very heavens! Bhatta exposed their follies and their weak points with pitiless logic and buttered all their strongholds and silenced the enemy everywhere. Then he explained to the king his chief

doctrines—that the Vedas were true and revealed verbally and so formed the best proof of their own authority and the touchstone of the revealed nature of Smritis, Puranas and the like; and that (curiously enough!) the earlier songs relating to Karmas were alone capable of saving men, so that the business of life according to him was to go through the Karmas enjoined in these writings. But the king's turn for abstract reasoning was apparently but of indifferent excellence and so he bluntly said, "(In matters of dialectics,) success depends on the amount of one's learning (and the readiness of one's tongue) and and I therefore declare that I shall hold the faith of that man among you to be true and enduring, who falling from the top of the adjacent hill remains whole!" Hereupon the Buddhists looked at each other but the Brahmin readily undertook to risk his person. The ordeal was accordingly gone through in the presence of a large crowd and Bhatta cast himself down with the exclamation already given and reached the ground 'like a pillow stuffed with down.' The Buddhists however argued that it was not the proper test in settling the truth of faiths for the body in such cases could be protected from harm by means of drugs or mantras or yogic practices, like holding one's breath and so on. The king was wroth and proposed a second test as an 'ultimatum.' He caused a jar to be brought into the assembly with its mouth carefully covered and sealed and said he would espouse the faith of the party which could say truly what was inside the jar. The parties met next morning and the Buddhists declared it to be a serpent, while Bhatta said it was the God Vishnu who makes the great serpent Sesha his bed. 'At these words of the Brahmin, the face of the king wore the look of the lotus when it has faded on account of the pond getting dried.' From this awkward predicament, however, the king was soon relieved, for a voice from heaven declared that the Brahmin was right and the other party wrong! The king cut all his doubts at once and issued the memorable edict, "*Let those (of my subjects) be slain who fail to slay the Buddhists old and young from the snowy mountains to the Bridge of Rama.*"

It has been thought desirable to give this account at some length, because, among other reasons, it gives, in however distorted a form, some of the methods adopted by revivalists in those days. If Bhatta had really had a dialectical victory at this court as at other courts, tradition would have recorded it just in a plain and straightforward manner, with a beaten simile or two about lions and foxes or fire and chaff. But reading between the lines of the version we have reproduced

from Madhava, it is clear that Bhatta's dialectics did not prove quite so successful here as in other cases; that, in all likelihood, it was he that made the king propose the test of falling 'from the hill,' or from some other height, for he had felt sure that he would succeed in it, having practised that jugglery for a long time with the loss of but one eye in the course of training; and that his trick having been found out by the shrewd Buddhists and he having failed to successfully guess the contents of the jar, he had recourse to dark and undesirable means to gain his end. As for the edict about the snowy mountains and Rama's Bridge it is all nonsense and bombast for the simple reason that India knew nothing of such a sovereign previous to the days of the Mahomedan emperors; while this same Sudhanvan who could issue such summary edicts applicable to the whole of India, is represented in another connection as hardly able to overcome a mob of Kapalika fanatics!

C. N. KRISHNASWAMI AIAH.

(To be continued)

THE CORONATION STONE OF DESTINY.

THE British Coronation Chair is six hundred years old, but not by centuries but millenniums is counted the age of the wonderful stone which it encases. This remarkable Stone has been a centre of study to antiquaries and scholars from times before the Christian Era, and throughout historic times no Coronation of Scottish Sovereigns, and later of English, (for the Stone is the possession of the Scots) was considered consummated unless the Anointing took place upon this Stone. And when we find an accomplished scholar like the late Dean Stanley of Westminster, Guardian of Westminster Abbey, say these words—"the Stone of Destiny is the one primeval monument that binds together the whole Empire"—we may be sure the history of the Stone is worth our attention in India as in Britain, as an integral portion of the one Great Empire.

The purpose is therefore to briefly trace the career of this wonderful Stone as we find it noted

in recorded history and traditional legend. For it is a Stone *sui generis* in our records. Wholly out of the category of the *Ambrosia Petree*, it has yet been guarded as a sacred relic in Great Britain for fourteen hundred years—for 800 in Scotland, and in England for 600. Besides this, it was for many centuries at Tara, in Ireland, the chief seat of the Irish Monarchs.

At the outset, let us note the remarkable verification of prophecy, in view of the Coronation of our King-Emperor, connected with this Stone. The old prophecy is to the effect that the possessor of the Stone shall be a descendant of the Royal Scots line. Here it is in Latin and in English:—

“Ni fallat fatum Scoti quocunque locatum
Invenient Lapidem, regnare tenentui ibidem.”

Which may be rendered thus:—

“Unless the Fates are faithless grown,

“And prophets’ voice be vain,

Wheresoe’er is found this Stone,

The Scottish race shall reign.”

Or as more tersely expressed in a couplet.—

“Unless old prophecies and words are vain

Where’er this Stone is found the Scots shall
reign.”

Is this the case? Is King Edward not an Englishman? No, not by blood. His right to the British Crown is through his Scotch descent. Every schoolboy knows that the House of Hanover acceded to the throne of Britain through the marriage of the grand-daughter of James Stewart, VI. of Scotland, and first of England, son of Mary the beautiful and ill-fated Queen of Scots. Sophia, daughter of Elizabeth Stewart, married the Elector of Hanover, and by the accession of her son, George I, the Crowns of Great Britain and Hanover became united. The present King, great grand-son of George III. is thus, by virtue, solely of his descent from James VI. of Scotland, inheritor of the throne of the United Empire, his sovereignty being the seal of the truth of the old prediction regarding the Stone of Destiny.

Let us now glance at its history. As is well

known, long before the *Lia Faill*, or Stone of Fate, came within touch of the Thames it reposed by the green banks of the Tay. Its home was in the Royal Abbey of Scoone, within the grounds of Scoone Palace, the residence of the Scottish Kings. This was in the ninth century A.D. but the earliest historic glimpse we have of it is between three and four hundred years before Christ. In those olden times there was constant internecine war in Scotland between the Scots and Picts, such as we find in Indian History between the Pandus and the Kurus for the supremacy of the holy land of the Doab, the Mesopotamia of the Jumna and the Ganges. The Scots were reduced to wandering, sorely harassed, “through the vast solitudes of Albion.” When Fergus, King of the Scots in Ireland, heard this dire news, his heart, the old historian Fordoun tells us, “burned with exceeding great wrath. He rallied round him a large following of adventurous spirits, set sail for Alban (the Celtic name of Scotland) forthwith, found the leaderless Scots in the western wilderness of Argyll, routed the warlike Picts, and constituted himself King of the Victorious Scots, confirming his sovereignty by his seating himself upon this very Stone of Destiny. For Fordoun tells us he brought it with him from Ireland. This was B. C. 330.

“The first of Scottish Kings that Albion boasts,

Who oft to victory led the Scottish hosts,

Was Fergus, Ferchad’s son whose mighty shield

Bore a red Lion on a yellow field;

Three hundred years and thirty was his reign

Before Christ came to break Sins deadly chain.”

(Note the ‘red Lion on the yellow field,’ on the shield of Fergus, for of this we shall say something more presently.) The Stone of Fate was placed in Dunstaffnage Castle, a royal fortress on the beautiful shores of Loch Etive, Argyll Shire, and there it remained for over a thousand years—all the Scots’ Kings were crowned upon it. One Coronation specially interesting we may mention. It was the Coronation of Aidan, by St. Columba, 574 A. D.

the first, probably, ever solemnized in Britain with ecclesiastical rites. St. Columba, the Abbot of Iona, was away in a neighbouring island, when, as his biographer Adamnan tells us, an angel appeared before him holding the glass book of the Ordination of Kings. Columba looked therein—(modern critics believe this to have been crystal—gazing—) and the name *Aidan* was clearly discernible. But the Abbot had a predilection for a younger brother of the man thus supernaturally nominated, and refused to officiate. Three times the angel appeared; three times Columba declined to perform the sacred function. 'But on the third night the angel with a scourge struck him a blow and registered a mark of the Saints' disobedience which remained till death.' The Abbot on this hid him away, blessed Aidan, and ordained him King.

We have seen that King Fergus 800 years before had subdued the Picts. But they were not conquered; and the next memorable Coronation upon the Sacred Stone was that of Kenneth II. the conqueror of the Picts. His accession is an important landmark in the history of Scotland, for under him Pictland and Scotland became a united kingdom, taking henceforth the name of the conquering race instead of Alban. The fusion of the two nations into one was the easier, when we remember that King Kenneth though Scotch by his father's side was Pictish by his mother's. It was this King who, for its greater security, removed the Stone from the Castle of Dunstaffnage to the Palace of Scoone in the centre of Scotland. For among the northern nations of Europe the Stone of Fate was a continual object of contention, the belief that whatever country possessed it would be the ruling Power, leading to constant wars. Scotland, however, was governed by a succession of able monarchs, who held their own, and consolidated the nation. Let us bear in mind that English History begins many centuries later than that of Scotland. The name *England* did not even exist till the ninth century, when Egbert of Wessex took the name of King of the Angles, or of

England. The Normans were the consolidators of the kingdom, and up to the time of Alexander III. of Scotland, the two countries were on friendly terms, intermarriages being frequent. It was only when Edward I. began to look with longing eyes towards the Stone of Destiny in its shrine in the Abbey of Scoone that that enmity between North and South Britain arose which lasted down to the time of the Union of the Crowns under the mutual heir of both, James VI. of Scotland being James I. of England. And this long line of the Stewart Dynasty in direct descent from Robert the Bruce has its male representative of the Blood-Royal at this hour of writing seated upon the Stone of Destiny, so long the Palladium of his race.

We have noted that Kenneth II. placed the Coronation Stone in the Royal Abbey of Scoone, the seat of Scottish Government. This was in 843 A.D. There it remained for over 400 years until Edward I. of England 'stole a march' and carried it off to London in 1296. But we shall mention one pathetic Coronation which took place upon it before it crossed the Scottish border, that of the boy King Alexander III. Only six days after the death of his father, Alexander II. his little son, eight years old, was seated on the throne mounted on the Stone of Destiny. The Bishops of the Premier Sees, St. Andrews and Dunkeld, and the Abbot of Scoone, in their gorgeous gowns, the nobles and a great assemblage of people, were gathered around the little King. 'Suddenly some one remembered that the child was not a Knight; the nobles discussed this important matter, and decided that knighthood was not essential in the consecration of Kings. Then the Bishop of St. Andrews explained to the little fellow the oaths that were to be taken by himself and his subjects, first in Latin, afterwards in French. He was then led to the Stone of Destiny, which stood facing the Cross, at the eastern end of the Chapel, and was there consecrated by the Bishop. The Crown was held over his baby head; the little hands, more used to toys, tried to enclose the Royal sceptre;

and arrayed in the Royal vestments and girded with the huge Sword of State, the boy with large eyes of wonder, received the homage of the nobles. At this moment a Highland Sennachy, or Bard, robed in scarlet, suddenly knelt before the Throne, with bent head, and addressed the King in Gaelic, then the Court language saying:—"Beaunach de Rìgh Alban Allister, MacAllister, MacWilliam," and so on through the long geneology of the Young King (i.e., Blessed be the King of Alban, Alexander, son of Alexander &c). The historian Skene says of this scene:—"Fordoun's description is so graphic that we can almost picture the scene. The Scottish July day; the Cross in the cimiterium; before it the Fateful Stone covered with gold-embroidered cloth; upon it a boy King; at the side the two Bishops and the Abbot of Scoone; before him the great Barons of Scotland kneeling before the ancient symbol of Scottish sovereignty; the stone; the eager Highland Sennachy pressing forward to utter his Celtic gutturals; in the back ground the Mount of Belief covered with a crowd of people gazing on the solema scene; and in the distance the blue range of the Grampians, broken only by the pass through which the river Tay emerges."

More than three hundred years pass away, but the Stone of Fate does not forget its destiny, and we find the twice-crowned King, James Stewart anointed the first King of the united realms of Scotland and England. As the present King is Edward VII. of England and I. of Scotland, so was James VI. of Scotland and I. of England. Though silent in these passing centuries—the thirteenth to the seventeenth—the prophecy attached to the Stone of Scoone, was fulfilled when the Scottish James VI. as James I. of England was crowned upon the Stone at his English inauguration at Westminster.

"Fuhar that Stone is, Scottis shall master be," says the old Scotch prediction. And upon "that Stone" every British Sovereign has received consecration since.

All this is matter of history, but what says far more ancient tradition?

The career of the Stone opens dramatically some four thousand years ago with an eventful incident in the life of the ancestor of many Kings, who saw visions at Bethel, and dreaded the holy place of prophetic dreams. At Luz, the pillow of him who was called "a Prince who had power with God" received the first oil of anointing to kingly consecration, at the hands of the great founder of the Royal House of David. And to this day the Stone beneath the Coronation Chair of Westminster Abbey is pointed out to visitors as "Jacob's Pillow."

But, it may be said, granted that the Stone is the actual Stone of Bethel, (for the extraordinary care of nations for it and their revering it as their chief treasure undoubtedly points to no ordinary claim)—what has that to do with the prophecy concerning it, and its singular relation to the Scots? Tradition answers the question. And in the East, if anywhere, tradition cannot be disregarded. Tradition, says the Scots (a branch of whom, by the way, were our warlike friends of Northern India, the Scythians) took their name from Scota an Eastern Princess, who was married to Gathelus, son of Cecrops King of Athens, and whose descendants founded a kingdom in the North of Ireland. Into this Kingdom came another fair Princess from the East. The legend goes that the Altar-pillow consecrated by Jacob at Luz was taken to Jerusalem, forming one of the sacred treasures of the Temple. It was known to be in the Temple at the time of the Babylonish Captivity—the "Eben Schethia" or chief corner Stone, in the sense of testifying to the presence of Jehovah.* Now it is

* Professor Ramsay, the eminent geologist, examined the Stone at the request of Dean Stanley, and expressed the opinion that it appeared as if it had been originally prepared for building purposes, but had not been so used and that it bore marks of having been borne about in many migrations. Possibly, then, there is literal as well as prophetic truth in the words of Scripture—"The Stone which the builders rejected is become the Chief Corner Stone," Ps. CXVIII. 22.

an undeniable historical fact that about the very time of the Babylonish Captivity B. C. 580, a "Princess from the East" did arrive in the North of Ireland, accompanied by two guardians. One of these was known as the *Ollam Fola*, a title composed of a Hebrew and a Celtic word, meaning a "Revealer or Prophet." The other was called Brug; and the name of the Princess was Tephî, or Tea Tephî, purely Hebrew, "implying all that is delectable in woman."

These distinguished visitors to the Court of the King of Ulster, had with them a very precious relic which was received into Ireland under the name of *Lia Phail*, which in Hebrew means—"The Stone wonderful or precious." It was regarded with the utmost reverence, and was the Coronation Stone on Tara Hill of all the Scot Kings of Ireland. Tephî herself, with whom the King of Ulster fell in love and married her, was crowned upon it, and Dean Stanley, who may be accepted as an authority on the subject, says in his "Memorials of Westminster Abbey,"—"The chief object of attraction to this day, to the innumerable visitors of the Abbey is, probably, that ancient Irish monument of the Empire, known as the Coronation Stone."

Now who were these three mysterious visitors who arrived in Ulster, and who bore with them so much of the Hebrew element? Tradition says they were Jeremiah the Prophet (the *Ollam Fola*) and Barach the Scribe (the Brug of Irish history)—and the Princess Tephî, daughter of King Zedekiah, who replanted in the British Isles the line of the King of Israel. We have already noted that the arrival of the "King's daughter" from the East corresponded in date with a time not long after the sack of Jerusalem, and flight of the remnant of Judah. The King of Babylon, we read, after slaying all Zedekiah's sons before his eyes, blinded him, bound him in chains, and carried him to Babylon, where he died in prison. But the whole of the Royal family were not destroyed. Two at least

of the Princesses escaped, and were carried into Egypt with Jeremiah the Prophet and Barach. The Royal refugees were entertained for a time in the House of Pharaoh, at Tahpanes in Egypt. But Jeremiah had a divine mission to execute, and with one at least of the Princesses (we can trace only one) set sail for the land of the Danites (Denmark) but was wrecked off the coast of Ireland, and hospitably received by the King of Ulster. Jeremiah's mission was "to build and to plant." He "built up" in Ulster a School of Prophets, called the *Mur Ollaman*, and he founded a system of jurisprudence based upon the Ten Commandments and on thoroughly Hebrew lines. He "planted" a line of sovereigns by his consent to the marriage of his royal ward to the King of Ulster, on condition of his renouncing Baalism and accepting the religion of his Bride. This, for the love he bore her, he did—as an old Celtic poem tells us—

"She received from him all favours she desired.

"And all his promises to her he fulfilled.

"Tephî was her name, she excelled all virgins."

Now all this is shadowed forth in sacred prophecy. It says of the legitimate succession of the ruling line after the destruction of Jerusalem that it should be a "tender one" i.e., feminine and not masculine a "King's daughter." It says the kingdom should "bring forth boughs," and "shoot forth sprigs," i.e., beget colonies. It says that "under it shall dwell fowl of every wing i.e., every nation shall trade with it and send their consuls and ambassadors to "dwell" in it. Finally, prophecy says "it will be a land of traffic" "a city of merchants," "planted by great waters" a "spreading vine." Can any present-day description be more accurate of the great and spreading British Empire? The Empire planted by the beautiful Princess Tephî of Judah, the "tender one," nearly 3000 years ago* and of whom

* Jeremiah prophesied that "David shall never want a man to sit upon the throne of the House of Israel." The word translated *man* is the Hebrew word *ish*, which includes either sex, consequently implies female succession.

our King-Emperor is, as we believe, the lineal descendant.

And all this time the Royal family clung closely to their *Lia Fail*, carrying it with them in all their migrations, planting it in *Scotland* on their founding a new kingdom; reverencing it throughout all vicissitudes as the seal of their supremacy. It was this superstitious belief in its power which induced Edward I. to carry it off to England, vainly imagining that he would in so doing subjugate the Scots and win a dual Crown. But what happened? Instead of winning a dual Crown for England, he prepared one for Scotland, when in process of time England was without an heir, and a Scottish King came back to his own. In vain Henry VIII. married six times to obtain an heir—Destiny must be fulfilled, and “that Stone” required that “where it should be, a Scot should be.” Regard it how we may, we must recognise something remarkable in the career of this ancient monolith. It has set its stamp on the annals of three warlike kingdoms. It has carried its course of supremacy from the sixth century B. C. to the twentieth A.D. Upheavals alike of Church and State have left it unmoved. Reformation, Revolution, Dynasties—all have passed. The Stone of Destiny remains.

We mentioned above “a lion rampant on a yellow field.” This, when you come to think of it, is a strange device for a Western nation. The Lion is an animal of a tropic clime, how comes he into the British Standard? In the upper and outer quartering of the Royal Standard is a Lion rampant, red, on a golden ground. This is the Lion of the Scotch Standard and was quartered in the Arms of England when James Stewart acceded to the dual throne, and Great Britain became a United Kingdom. He inherited his quarterings from his ancestors, the Kings of Ulster, the Keepers of the Stone of Destiny and the descendants of the Princess from the East. And it happens that the lion is also the blazon of the House of David. Curiously enough, there is also

the Unicorn in the Royal Arms—for it was said of Israel, “he hath the strength of an Unicorn.” So that we have been for centuries, as it has been well remarked, “flying David’s banner over our Royal residences.”

It has also been related that the late revered Queen-Empress, than whom no one had a clearer head, accepted with the Prince consort the tradition of her Scotch descent from the House of David, King of Israel. In the family Tree of the British Royal line the name *David* is engrossed at the foot of the Tree and the name *Victoria* in a remote top-most branch—yet in an unbroken line.

The Stone in appearance is simply a rough block of red sandstone showing traces of great antiquity and many buffetings. Canon Tristram in his book *The Land of Moab* says that just the same description of Stone is found near the surface (where Jacob could easily find it) on the Western shores of the Dead Sea. It is about three fourths of a yard long, and about half a yard broad. Placed in the ancient Chapel of Edward the Confessor, in Westminster, it is cased beneath the antique carved Coronation Chair, and is never moved. The Chair was specially made to fit it six hundred years ago by order of Edward I. and is still in fair preservation. It is always covered with Cloth of Gold for Coronation ceremonies.

Such is the Coronation Stone which the greatest Empire on earth and the most practical preserves as a precious relic in the inner shrine of the greatest of her Abbeyes.

Such is the Stone, hoar in historic antiquity upon which monarchs of the Scottish Blood-Royal for two thousand years have been invested with
“The round and top of sovereignty.”

FREDERICK BARR.

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THE LAKE OF PALMS.*

THE Lake of Palms is an excellent novel by Mr. R. C. Dutt, descriptive of middle class Hindu home life. We conceive it is the first attempt of Mr. Dutt to enlighten the English public of matters Indian through the medium of a novel. We believe his poetical version of the great Indian epics is known to English readers and we must congratulate Mr. Dutt upon the success he has achieved in the new role of a novelist.

The story is entirely Indian. Although there is not much of a plot to speak of, the short story has furnished him with a setting for charming descriptions of scenes of Hindu home life. The story begins with a young Hindu widow and her two little daughters at the lakeside in the little village of the Lake of Palms. Her husband who was the mainstay of the little family was gone, and she is thrown on her small resources with two little girls on her hands. She is taken into the house of a rich relative with her daughters who grow up there in the companionship of Uma, the handsome daughter of the house. The young widow has all the resignation of the average Hindu widow and far from bemoaning her lot is content to make the best of her situation and her only anxiety in life is to see her daughters well married. *Bindu* and *Sudha* grow up in their new home, two innocent sisters whose horizon was the little village in which they lived. They have another companion in *Kali* the daughter of a neighbour and all the girls grow up in strong mutual friendship. The mother's one ambition in life is gratified and *Bindu* and *Sudha* are married. *Hem* was a young man of high character but with little property and he pitied the condition of the orphan children and selected *Bindu* for his wife against the advice of knowing elders.

They are married while they are girls and their mother dies soon after. But little *Sudha* becomes a widow before she is twelve and has not even realised what marriage and widowhood meant. *Kali* and *Uma* are likewise married, the former to a middle aged man of forty and the latter to a young Zamindar of fortune. As years roll on the girls join their husbands in their own homes and are separated. Poor *Sudha* lives with her sister. *Hem* has now a family to take care of, his little wife and

two children and a widowed sister-in-law. His means are small and the few acres he owns give him enough to live in happiness if not in comfort.

Love in India begins and grows after marriage unlike the countries in the West. *Hem* and *Bindu* live a happy and contented life and join each other's love and affection. *Bindu* knows no man but her lord and husband, and no male society but that of her husband has any attractions for her.

Kali has a brother *Sarat* reading for his degree at a College in Calcutta. He is on a visit to *Hem* and begs him hard to spend a few days in Calcutta with his small family. Mr. Dutt's description of the separation of his little family from the village home and the feelings of genuine grief which their departure inspires in the circle of village friends can hardly be appreciated by the English reader. But to one acquainted with Indian life, the picture is lifelike. *Sarat* courted the companionship of his friends for he was alone in the wide world of Calcutta. His aged mother who loved with the doting affection of a Hindu mother but whose affection was yet subordinate to the devotion to the life hereafter had left him for Benares to spend and end her days in the holiest of holy cities.

Sarat and his village friends live close to each other and the young man is a daily visitor to the house of *Hem* where he narrates to the family group the stories of the wide world, with which as a college student he is more familiar. Their intimacy grows and *Sarat* is stricken with the charms of the simple and unfortunate *Sudha*. He dare not make love to her for the marriage of a high caste Hindu widow is prohibited by custom though the great Vidyasagar had proclaimed the authority of the Sastra in its favour. Custom rules Hindu society more than the law and the shastra and the young man shuts himself up and pines away unable to find a solution to the difficulty. After days and months of self-banishment he resolves to make an appeal to the elder sister to help him in his trouble. One night he pays a visit to *Bindu* and opens his heart to her. *Bindu* knows the young man's fancy to be a foolish dream but she had known him long and his sincerity was beyond all question. He promises to lay the matter before her husband and communicates the decision though she knew well enough what it would be. The husband and the wife consult together. They knew that the condition of the young man was desperate and their refusal would drive him mad. They knew also the odium which society would heap upon them:

* A story of Indian Domestic Life.—By Romesh Chunder Dutt, G.L.E. London, T. Fisher Unwin. (Price Rs. 3. To be had of G. A. Natesan & Co., Esplanade, Madras.)

They had heard that the shastras sanctioned the union. They were simple and honest folks. What right had they to sacrifice the happiness of the little girl that they may enjoy the good-will of society. They took their decision and *Sarat* was told that they would not stand in the way of his happiness. News of their intended alliance spread abroad and people far and near began to shake their heads. *Sarat's* mother in distant Benares heard the ugly rumour and began to grieve that the fair fame of their ancient family was about to receive a stain from the hand of her loving and beautiful son. She wrote from Benares that she could not believe the story of her son. *Sarat* was once more cast in gloom. The old lady came to Calcutta and said the marriage must not be performed. *Sarat* loved his mother more than himself and everywhere feeling of happiness for himself gave way before his duty to his aged mother whose end he would not hasten by sorrow. He leaves Calcutta. *Kali's* middle aged husband is very ill and all medical skill is of no avail. *Kali's* mother-in-law whose watchful eye looks after the house and all its wants dreams a dream that a pilgrimage to Jagannath would save her son. *Sarat* is a welcome companion to this group of pilgrims—*Kali*, her husband and his mother on their way to the holy city by the seashore. Mr. Dutt takes advantage of this journey to give short little descriptions of several Indian towns and villages through which the pilgrims pass. Jagannath is reached. The change of air and scene and we may be permitted to add the influence of that benign power which manifests itself in shapes and forms unknown to man restored the invalid to his normal health. The pilgrims return to their native city but one of them would stay behind. The aged mother-in-law whose care and foresight had regulated every detail of domestic life has had enough of life's cares and anxieties and must devote the rest of her days to the service of God. The happiness of domestic life, the attachment of a loving son, the respect and obedience of her daughters and her daughter-in-law are nothing now to her. Her son had been restored to health and her wise and dutiful daughter-in-law must now manage the home which had hitherto been proud of her sway.

She must live in Jagannath for the rest of her life. The rest of the company sorrowing leave her behind. Meanwhile one of the three girl companions of the village, beautiful *Uma* wedded to the rich Zemindar was going through a series of misfortunes which her sisters less favoured by fortune had not to undergo. *Uma's* husband was drawn into the stream of the high society of

Calcutta. Drawn to evil ways he went from bad to worse. Feasts and nautches and theatricals followed in rapid succession and the young man who began his life as a loving husband soon neglected his consort and plunged her into misery. Separated from all the world, *Uma* spent her days and her nights in sorrow. One day it chanced that Hem passed the palatial residence of the Zemindar. Attracted by the mirth he enquired and learnt that it was the house of *Uma's* husband. He went in and was welcomed by the Bacchanalian group. He managed to have a talk with *Uma* whose misery and anguish of heart he was easily able to divine. He returned home and sent his wife to help *Uma* in her misery. The companions of childhood once again met and communicated their sorrows to each other—*Bindu*, the condition of her sister *Sudha* against whom society had vowed its vengeance for daring to entertain the idea of remarriage and proud *Uma*, her loneliness amidst all the wealth and luxury and pomp by which she was surrounded. *Bindu* could bring no succour to the afflicted love of *Uma* and proud in her loneliness. *Uma* pined away in grief. Unable to bear this load of grief any longer, *Uma* threw aside her rich garments and the jewels her husband had given her in days of affection. She left the home that was no longer dear to her in the robes of a mendicant. *Uma* was gone and the husband felt dismayed. The recollections of earlier years and all the affection of their old married life crowded upon him. *Uma* had stolen from the house by night. Men went about to seek her and found no trace of her. She was last observed near the Hoogly bathing ghaut and the rest was matter for conjecture. He had spent his fortune upon wine and women but that was nothing. The idea of murder drove him mad. Remorse now stung his soul and he became a homeless wanderer from place to place. Mr. Dutt has given a touching picture of this distracted husband who pays heavily for his wild ways. At last he obtains some clue to the mystery. His wife *Uma* is not dead but she is a wanderer on the face of the earth. He seeks her in town and village, in one holy city after another and at last weary and footsore he is exhausted on the steps leading to the river Gya. He had traced her to Gya city, to the house where she lodged, to the companions with whom she stayed last but still he found her not. As he lay on the steps of the river unconscious he felt the touch of her familiar hand. He opened his eyes and saw his own dear *Uma* who stood before him in the garb of a *sanyasini* who had renounced the world. She had steeled her heart against her husband but she was a Hindu wife and the power of old love and

the sense of duty mastered her strong nature. She yielded and the husband who had paid dearly for his sins, heavy as they were, besought forgiveness for the past and led his weeping wife once again to his ancestral home.

Sarat had returned from the pilgrimage to Jagannath and his old mother to whom the one attachment in life was her son, relented. She took counsel of the Shastris and withdrew her injunction against Sarat's marriage with Sudha. The quiet girl who knew not the meaning of her enforced widowhood in India and who suddenly awoke to a sense of her misery when she was on every body's lips was now united to the young man who loved her and pitied her and whose love she returned with her whole heart.

Hem is taken into the service of our familiar friend the Zemindar and all the girls who had grown in their loving childhood in the Lake of Palms was once more brought together in the happiness of their wedded lives.

The simple story is told in a most attractive manner and while it will remind the Hindu reader of scenes and characters with which he is familiar it will enable the English reader to acquire a knowledge of Indian home life which many years' residence in this country has not given to the majority of Englishmen. Mr. Dutt has availed himself of the opportunity afforded by the narration of the story to introduce some of his favourite political ideas which are exceedingly unsavoury to the majority of Anglo-Indians.

But we would ask Englishmen at home and in India to put aside their prejudice and to read this novel of Indian life which is likely to give a far better insight into the ways and habits of thought of their Indian fellow subjects than piles of official reports. Mr. Dutt is master of a happy literary style and few Englishmen in this country can boast of the power of narration which Mr. Dutt has displayed in this volume. We congratulate Mr. Dutt on the happy inspiration that suggested to him this piece of literary work and upon the service he has done to his countrymen in enabling their English masters to gain some insight into their ways and modes of thought.

V. KRISHNASWAMI Aiyar.

The World of Books.

THE INDIA OF AURANGZIB by Jadunath Sarkar, M.A., Professor of English Literature, Patna College. (Bose Brothers, Calcutta, 1902. Price Two Rupees).

The author Mr. Jadunath Sarkar, makes an able and successful attempt to compare the India of Aurangzib with the India of Akbar in regard to topography, statistics, and roads. The comparison is founded on materials supplied by two Persian works written by Hindu historians, viz., the *Khulasat-t-Tawarikh* of Sujjan Rai (written in 1699) and the *Chahar Gulshan* of Chatter Man (written in 1759). Professor Sarkar translates, with annotations, only portions of these works, as his aim is only to supply the gap in our knowledge of Indian topography and statistics in the interval between the appearance of the *Ain-i-Akbari* and the foundation of the British Empire in India. The Professor does not evidently think highly of the accounts of Kings and saints given in these works.

The most valuable part of the volume is the elaborate and learned introduction prefixed by Professor Sarkar to his translation of the works of the two Hindu historians of the past. In dealing with the extent and revenue of the Moghul Empire as a whole, as well as with the separate provinces, the author shows clearly that the Moghul administration was not one of an immobile and stereotyped character, but was marked by the elasticity and expansiveness which are never found wanting in every political system that has lived usefully for centuries. Professor Sarkar brings out clearly both the external expansion of the Moghul Empire by the annexation of new provinces and the internal growth of the old provinces by the progress of surveys, the sub-division of territory, and the improvement of the administrative system. The author's topographical notes are throughout interesting, and he also brings together a vast amount of important and valuable information regarding the mines, animals, crops, industries, and manufactures of the several provinces of the Empire. Professor Sarkar's notes on the customs and modes of living of the people form an interesting feature of his Introduction.

The volume is not only interesting as furnishing useful information to the historian and student regarding an important period of Indian history, but is, in our view, a work of special value as founded on authentic materials supplied by two Hindu historians of the past.

THE IDEAL OF UNIVERSITIES by *Adolf Brodbeck, Ph. D.* (Published by the *Metaphysical Publishing Company*, 503, Fifth Avenue New York).

This is a re-print of nine essays by the author which appeared in the *Metaphysical Magazine* of New York. They do not attempt to deal exhaustively with the various topics which suggest themselves in connection with the Universities. The questions which the author sets before himself are :—

(1) Where the lower schools should end and the Universities begin ?

(2) What should be the pursuits of the Universities ? and,

(3) What is the proper relation of Universities to the State ?

As a preliminary to the solution of these questions, Dr. Brodbeck considers the ideals of learning which have prevailed in Universities at different stages in the history of Europe and are now represented in the different faculties of a modern University. What the author means by ideals of learning is not so much the ends or objects which are desired to be attained by learning as the subjects of study which commanded the greatest attention. The four main ideals of learning according to him are :—(1) Philosophy which was the favourite pursuit of the Greeks ; (2) Law which was the chief study among the Romans ; (3) Theology which was predominant in the middle ages and (4) Physical science which has been most cultivated in modern times. In each of these departments of knowledge the author distinguishes four currents of thought which have tended to influence the study of it at the present time. This, however, is a matter of detail which it is unnecessary to go into here. The upper limit of the secondary education which qualifies for entrance into the University is reached in the Grammar Schools of England or the gymnasia or the Real-Schulon of Germany. While importance is attached to the study of the classical languages in the Grammar Schools and to the study of sciences and modern languages in the Real-Schulon a new class of institutions has arisen called Real-Gymnasien in Germany in which the claims of the classical languages as well as those of Science and modern languages are equally recognised and instruction in all is regarded as a preparation for the University.

The true function of a University is to provide facilities for the acquisition of knowledge and power, to translate it into more familiar language for the acquirement of a knowledge of theory and

practice in so far as the latter implies a knowledge of principles and rises above mere handicraft. The Universities now in existence impart only theoretical knowledge and a student must resort to the higher technical schools if he seeks practical knowledge. The ideal University for the future is one which will make provision for both departments of knowledge. Even after such an ideal University comes into existence special schools for special subjects must continue to exist. But these special schools must avoid the danger of the narrowing effects of overspecialization, by providing for instruction in subsidiary and connected subjects and by including in its staff teachers who can co-ordinate knowledge and not merely devote themselves to the investigation of some microscopic portion of the field of truth. As to the relation of the state to the University the dependence of the University upon the support of the Government is attended by disadvantages as well as advantages. Such dependence is not favourable to the progress of truth especially in the moral sciences. The ideal University should be completely independent of Church and State and established as a private institution, by private subscription. The State should be morally bound to acknowledge it as a power and assist it pecuniarily without interfering with its policy. The most pretentious essay in the book and one upon which the author evidently sets great value is the one which attempts to classify all the sciences. Dr. Brodbeck states he has qualified himself by making encyclopædic studies for five years in the South Kensington Museum. But we very much doubt whether his classification is likely to be acceptable to scientists. Witness for instance his classification of plants and animals according as they inhabit the water pond or the soil.

Theoretical science, he divides into fundamental, objective and subjective science. Technical knowledge is divided into fundamental, objective, and subjective technics. What the author means by fundamental science is practically logic, and the classification of the sciences. By objective science is meant the science of material objects and by subjective science the science of ethics and the cognate sciences dealing with man. We cannot within the limits of this short review give the further details of the classification nor do we think it would be of much profit to our readers. The chief striking feature about the book is the uncouth terminology adopted by the author. The author often loses himself in vague and obscure generalities and the fact that he is his own translator from the German has perhaps suggested the defect.

The Story of Music by George Crowest.
Newnes Limited.

There is no reason why the story of the divine art of music should not be compressed into a volume of the popular hand-book dimensions, provided it is well and judiciously done, and this, allowing for certain idiosyncracies and personal opinions of the author, is what has been achieved in the little volume under review. In Music perhaps there have been, and will be more orthodoxies and heterodoxies than in any other science and art, and this must always be the case in a matter which appeals wholly to the emotional side of a man. Therefore, when our author departs from facts and allows himself to comment and express his own opinion, there is always room for divergence of opinion between him and his readers. For ourselves we confess that in the main we agree with him almost entirely in his estimates of musicians and measures that come under his examination. It is always difficult in the case of so complicated a science and one which—*pace* the late Rev. Mr. Haweis—has not and probably will not ever reach a stage of final development to compress its story into the compass that has been attempted. What has been done however has been well achieved; and even in its primer form the little volume is in certain purposes a valuable work of reference. The author dismisses the origin of music in a few words and there is no doubt that the youngest and the greatest of the arts is practically one of the oldest, dating back to the time when man was able to take an interest in various natural causes such as the sighing of leaves, the songs of the birds, the roar of the ocean, or the impressive tones of mighty thunder. The man who first tried to reproduce these raw sounds may be said to be the “father of music.” The more regulated and chastely formed are the sounds the better is the music, and the story of music from the earliest to the present day is the regulating and garnering of musical sounds. All musical instruments are, as is well known, divided into three classes, instruments of percussion such as the drum and cymbals, reed instruments dependent for the production of sound on wind, the greatest modern development of which is the organ, and finally stringed instruments such as the harp, violin and modern pianoforte. The combination of these three classes of sounds in harmony is the object of the modern orchestra. The necessity for music brought in its train naturally the need for some sort of musical notation or writing to ensure the sounds being subsequently correctly reproduced and though in all nations in which music in some form of development existed possessed some

method of musical notation, it was not until the year (990-1050) of Guido, surnamed *Inventor Musicae*, that the scale was reconstructed on its present solid basis. The next development was introduction of time notes and rests and the credit for this belongs to Franco, a monk of Cologne. This done music was set on its great march. The earliest specimens we have of harmonised music therefore, are the folk songs of the troubadours, minnesingers, minstrels. The Church too has taken a great, perhaps, the leading part in the development of an art which contributes so great to the beauty and impressiveness of its services. With the introduction of the organ, counterpoint took its rise and then musical harmonies had reached a stage of development which made everything possible. The Fourteenth century saw the rise of opera and orchestra which last reached its most perfected form in the Passion music of Bach and the masterpieces of Handel—the finest and most imperishable of which is “The Messiah”—Symphony is associated with the names of Haydon, Mozart and Beethoven; Opera with Gluck and Verdi. The writer believes that the possibility of an English school which would have received a very high position in the world of music was ruined by the overpowering grandeur and strength of Handel. The story of music in England since Purcell's days has been one long striving after an English musical supremacy and the struggle has been important from its artistic result: but an agreement seems not to be wanting as to what English style is or shall be. Space precludes our dealing any further with the little volume but the later and most up-to-date chapters give the ordinary amateur dilettante musician many a hint and suggestion that is worth treasuring for its own sake.

SPEECHES AND PAPERS ON INDIAN QUESTIONS by *Romesh C. Dutt, C. I. E.*

Second Series. (G. A. Natesan and Co., Esplanade, Madras. Price Rs. 2).

In this volume have been collected together Mr. Dutt's speeches and writings for the last two years. They bear testimony to the unceasing perseverance with which Mr. Dutt has been placing before the English and the Indian public the true facts in regard to the condition of the country and the people. Besides several other important utterances and contributions this volume contains Mr. Dutt's replies to the Government of India's resolution on Land Revenue originally published in four issues of the *Pioneer*.

A Catechism of Individualism by Henry Wilson M.A., "The Liberty Review" Publishing Co.

The author of this catechism says *Individualism* is the opposite of *Socialism* and he gives this negative definition because Individualism is the natural system, and would never have got a distinct name, or have had to search for its principles, and the reasons on which they are founded but for the rise of the artificial system of socialism. The writer thus sums up the Individualist's doctrine :

Individualism means enlisting the natural tendencies of human nature on behalf of well-being, as we all do when we reward our children if they are good and punish them if disobedient, and as a workman avails himself of the natural forces of gravitation, friction, etc., to do his work with the least effort. It holds, with Jesus, that good and evil spring from the heart of man and thence affect his surroundings, so that the way to improve him is to deal with the cause, by persuasion, and not with the effect, by compulsion. It holds that social progress, like all natural healthy growths, is slow and that no forced and artificial effect is permanent. It holds that every action has indirect and remote effects as well as immediate ones, and that the former are generally more important. It holds that the State has no money but what it takes from the people. It holds that denunciation of the idle rich who have earned or lawfully acquired their riches accords ill with the proposal to pension a man at his prime whether he has earned his pension or not. It holds that imperfect instruments cannot turn out perfect work, however good the scheme. It holds that periodicity is the law of the universe, so that the only way to prosperity is to work hard while we have the chance and make hay while the sun shines. It points to the success of the Jews and of all brain workers who pursue this plan. It points out that the time of England's prosperity coincides with the reign of *laissez faire* and the complaints of German competition with the present system of socialist interference.

STUDIES IN SHAKESPEARE,

By the Hon. Rev. Dr. MILLER, C. I. E.

- I. *Hamlet and the Waste of Life.*
- II. *Macbeth and the Ruin of Souls.*
- III. *King Lear and Indian Politics.*

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APPLY TO—G. A. NATESAN & Co., Esplanade, Madras.

THE MADRAS LAW JOURNAL DIGEST 1891—1900. By S. Srinivasa Aiyar, B.A., B.L. Price Rs. 5.

The *Madras Law Journal* needs no recommendation to members of the legal profession. Its legal literature has always been marked by merit and usefulness. It was an excellent idea of Mr. Srinivasa Aiyar to have prepared this Digest of the last ten volumes of this Journal.

The first part contains an index of the names of articles, notes of cases, jottings and cuttings, and the reports of cases. The second part is a digest of the reports, and the third of the leading articles, and critical notes of cases. We have no doubt that this volume which contains over 400 pages of closely printed matter will be found to be a useful book of reference by all legal practitioners and the low price of Rs. 5 must make it accessible to all.

Books Received.

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India and its Problems by William Samuel Lilly. 7/6

T. FISHER UNWIN.

The Heart of the Empire ... 2/6

Stronger than love by Mrs. Alexander.

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E. J. Hardy, M.A. ... 1/-

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Education and Empire by Richard Haldane, ... 5/-

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LORD SALISBURY.

Mr. Julian Ralph contributes to the *July Century* an appreciative notice of the Marquis of Salisbury. The incidents of his long public life and the great movements that he influenced cannot be recounted here. The Marquis, though not exactly despised by fortune, has had to graduate in the school of difficulty like many other truly great men. His experience of hardship and strenuous labour in early life must have been of immense use in the trials of office even to the man who, among his contemporaries, was remarkable for lack of sympathy and aristocratic aloofness. In his twentieth year he left college, and making the grand tour of Europe, went to New Zealand where he lived for some time the life of cattlemen. He was then induced to try his fortune at gold-digging in Australia where he lived in the rudest sort of shack and was known among his fellow miners as Long Bob Cecil. On returning home in 1853 he entered the House of Commons as member for Stamford, a constituency which was faithful to him till 1868, the year of his translation to the Upper House. His marriage in 1857 with a lady of no means displeased his father and threw him upon his own resources. It was then that he joined the ranks of journalism, and lived by his contributions to the *Saturday Review*, the *Quarterly*, the *Morning Chronicle* and the *Times*. It was not till 1865 that by the death of his elder brother he became Lord Cranborne and was freed from the necessity of writing for the press for his livelihood. Three years later he succeeded to the Marquisate of his father and took his seat in the House of Lords. For one year in 1866 and for two years in 1874 and 1875 he was Secretary of State for India. In 1878 he succeeded Lord Derby as Secretary of State for Foreign Affairs, and this office he kept in his own hands whenever his party was in power until quite recently when he conferred it upon Lord Lansdowne. It is as Foreign Secretary that Lord Salisbury must be judged, for in domestic legislation he allowed others to play the chief part, perhaps finding for his aristocratic temper a more suitable field in the conduct of foreign affairs where he could keep his own counsel and keep out the interfering tendency of the democratic age, with which he had none too much sympathy. Whether it was owing to his own love of peace or the late Queen's intense aversion to war, Lord Salisbury's foreign policy was marked by what his adherents call graceful concessions and what his opponents call weak surrender of prestige and territory. But his patience, good humour and consummate skill were

markedly displayed in his avoidance of war in 1895 at the time of the Venezuela message of President Cleveland and a little later when the Kaiser sent his impulsive message of sympathy to President Kruger.

By agreements with Portugal, France and Germany he determined the possessions and boundaries of the various European holdings in Africa, and if he did not restore and preserve England's former relations with Turkey, he did so control her place in Egypt as to put England's supremacy there beyond future question.

The following extract describes his career in the House of Commons.

He is said to have cut an awkward figure when addressing his fellow-members. He gesticulated ungracefully, even clumsily, and his voice was harsh and inflexible. As a politician he was not to be depended upon by his own party, and so biting and severe were his retorts in debate and his characterizations of the men and principles which he opposed, so seemingly needless and uncalled for were his sarcastic utterances, that many members heartily disliked and many others feared him. His great gifts, other than the intellectual equipment which rendered him instantly ready and resourceful in debate, did not make themselves apparent at this time, unless they were recognized in the very narrow circle of his intimates. Intense conservatism, a haughty, unwavering devotion to caste, and a firm faith in the virtues and established rights of the nobility and the Church—these principles never lost his support or found him wavering; but he did not hesitate to differ with his party at times, and (even by his pen, at least) to warn that party against its leader, when that leader was Disraeli.

In the House of Lords he was more in his element.

He found almost no chance, or leave either, to continue in the calm and staid upper house the style of speaking which had most distinguished him when he was laying the foundations of his public career. Though it was in that chamber that he was called "a master of flouts and gibes and jeers," he had both mellowed a great deal and, to a greater extent, had learned to control himself. At the worst, he had never been cruel or intense, and though his retorts and comments in debate had stung many men and had moved even more men to dislike him, they were regarded and intended by him but as the sparks which fly from iron on an anvil and serve rather to point out their source and occasion than to do damage of themselves. On the other hand, he did bring to the House of Lords more of importance and interest to the country than it was enjoying when he first lent to it his youthful energy, the fresh result of his study of public affairs, his resourcefulness, wit, and brilliancy as a speaker, and his extraordinary mental gifts and information.

Only two men bulked more largely in the public eye,—Mr. Gladstone whose impressive personality dwarfed all others in popular imagination, and Lord Beaconsfield who outshone everybody in the gilded chamber by his pyrotechnic brilliancy. Of his speaking Mr. Ralph writes:—

He possesses sincerity, but it is always manifested without enthusiasm. He has eloquence of a highly polished kind, but it is better calculated to please the edu-

cated than the plain people. Only in one campaign against the Gladstone Home Rule Bill did he "swing round the circle" with stump speeches to the people, and then it became very evident that, if he cared to get in touch with the masses, he did not succeed in doing so, but stood apart and addressed the higher intelligence of the few rather than the hearts or the prejudices of the many. He used no notes, but spoke with slight preparation and from deep conviction. The frequency of brilliant and perfectly worded similes, characterizations, and what Disraeli called "jeers and taunts" in his addresses, suggested careful preparation and a marvellous memory. That last he must have had, for in debate in the House of Lords he never took written notes of the points he meant to answer or the answers he meant to make, yet he rose in his turn fully armed with reply. He leaned heavily upon one hand in speaking, and spoke without halts or breaks to the end of what he had to say.

Lord Salisbury has been an indefatigable reader of the literature of the day, and has ever been in the very front rank of scientists and philosophers. A keen student of philosophy who enjoyed the Premier's friendship and intimacy once hurried to Hatfield to air his acquaintance with an important French philosophical work of which he had secured a first copy. Upon his broaching the subject the Marquis quietly said, "Yes; I read the work in advance proofs sent me by the author," and began to discuss it minutely. We must close this topic now with a paragraph dealing with the scientific recreations of the ex-Premier.

Still pleasanter to him are the hours he spends in his laboratory, which is said to be unsurpassed in completeness and modernness by any private laboratory in England. From his youth he has had a bent for his work, and in physics especially he has attained such knowledge as to be sought, for counsel and discussion, by some of the greatest minds in that field. It is even said of him that if he had not been a great statesman he would have made a greater scientist. The reason that he has written and spoken very little upon scientific subjects is that, owing to his modesty and because of his association with many brilliant lights in science, he perhaps too fully realizes that other men have a better right than he to discuss in public those matters in which he feels himself to be only a student. He has turned his work and knowledge to practical account at Hatfield, where the manor-house, outbuildings, and grounds are illuminated by electricity generated by the water-power provided by the river Lea, which runs through the estate. This power performs other useful work as well. The devices by which it serves these purposes are of the most modern and perfect character, and were planned by the marquis.

IMPERIAL FEDERATION.

An article on the Empire and Peace in the *United Service Magazine* for July is a plea for Imperial Federation. Mr. C. de Thierry the author is hard upon Downing Street Statesmanship and the incapacity of the military authorities. He is full of

admiration for the splendid loyalty of the colonies and the efficiency of their troops. The Mother Country, according to this writer, is much behind her colonies not only in military organization, but also in appreciation of the present situation, so that it is not right to say that the colonies responded to England; rather it was England that responded to the colonies. No credit whatever is due to the War Office for the conduct of the war. It is ridiculous for it to pride itself, as it does, on 'muddling through' a great war. With the steamship, telephone, railway, and telegraph, is it a great thing to have transported 2,00,000 men over 6,000 miles of ocean? Mr. Brodrick should have been rebuked in Parliament for boasting of it. Then the attitude of the opposition is a subject of great complaint in the colonies. They cannot be expected to submit to be ruled by a Cabinet consisting of Campbell Bannermans, Courtney, Morleys, and Harcourts. They fully believe what Mr. Seddon has said,—that the war would have ended long ago but for the opposition. The principle of Free Trade is then freely denounced. The writer contends that it only means Free Imports. It has built up not the British Empire, but the United States, which is our most powerful rival. It will, if persevered in, deprive England of colonial aid, and dethrone her from her commercial pre-eminence. What will Free Trade do in South Africa? The country is about to become the happy hunting-ground of our most aggressive rivals. Europe and the United States are to reap the benefits of the sovereignty established by the British at such great sacrifice." Truly, Free Trade is an excellent theory, and it is no wonder that the world gives it unqualified admiration. A better test of its sincerity would be the abandonment of protection as a fiscal policy." Finally, the writer is full of indignation at the treatment accorded by the Government to the Loyalists. "No tribute was paid to their heroic endurance, no sympathy was expressed with their ruined condition. We have spent at least 6 millions on the Boers, and £ 50,000 on the Loyalists. Then we cry aloud to creation to witness our generosity!" "But the step-motherly spirit of England is an old story." "That it does not pay to be loyal to England is as true to-day as it was 22 years ago, and 122 years ago; but as South Africans are loyal, not to England, but to the Empire, they have their reward. But when Englishmen speak of their generosity, let them remember the contrast between their treatment of the Boers and the Loyalists, and for very shame hold their peace."

THE DANGER OF OVER-DEVELOPMENT IN MUNICIPAL TRADING.

Mr. Herbert. H. Basseth, in the July number of the *Investor's Chronicle*, puts the interesting question "whither the Municipalities, Tory, Radical, Socialistic are financially drifting in their municipal enterprises." The political significance of the threatened over-development of provincial cities and towns has not been overlooked by him. In the present article however he confines his attention to the financial aspect of the question alone, which, he says, deserves the consideration of every investor in Corporation loans apart from its general interest to economists. Few cities in England are over twenty five years of age, so far as their real municipal birth is concerned and, as the writer puts it, the majority are not yet out of their swaddling clothes. In the year 1875 in which the Local Loans Act was passed the rateable value of the towns of England and Wales amounted to £. 119,079,000 and the outstanding loans to £. 99,407,000 or about twenty six millions less than the rateable value. The outstanding loans are now about £. 100,000,000 more than the rateable value. Thus at the end of the financial year of 1899, the total sum outstanding was £. 276,229,048. With reference to this the writer observes:—

Whilst the country has been watching with pride during twenty-five years (that is, until the recent war period) the steady annual reduction of the National Debt, aggregating about 141,000,000*l.* during the period, the local authorities of England and Wales, have added to their debt about 183,000,000*l.* When, therefore, we take into account the recent increase in the National Debt for war purposes, we may safely estimate the present country's burden of indebtedness at very little less than 1,000,000,000*l.*, or equal to about 29*l.* per head of population.

These are figures which are giving rise to grave misgivings among those who have followed local government finance, not because of any doubt respecting the ability of the country to meet its obligations in the shape of the interest on and redemption of the loans, but because of the rapid increase in the outstanding amounts. Are the provincial towns and boroughs increasing in wealth in proportion to their indebtedness? Are the loans being raised for purposes which will ultimately be reproductive and bring profit to the ratepayer's exchequer? Has the growing annual interest any relation to the general increase in rates throughout the country?

He leaves the first and the last of these questions to be answered by local authorities who possess the necessary data. With respect to the second question, he points out, that the loans raised for reproductive works amount to £. 121,717,472 and those for non-reproductive works amount to £. 154,511,578.

"Many of the purposes for which the loans have been raised such as schools, bridges, ferries etc., under the latter head are presumably partially reproductive. Bridges and ferries may be expected to return a small amount in tolls, hospitals and lunatic asylums in fees, cemeteries in rents, etc., but they cannot rightly be regarded as directly reproductive, and it is doubtful whether more than a very small number yield sufficient revenue to meet the interest upon the capital outlay. In the case of parks, public buildings, public libraries etc., it is very certain that the loans would have to be charged directly upon the rates. In some cases the loans which I have set down as reproductive constitute a charge upon the rates when the revenues have proved insufficient to meet the payments of interest, and it is quite possible that in a number of them the undertakings are carried on at a heavy loss."

Evidence of this is to be found in the continued increase of obligations. Many of the loans are redeemable in ten, fifteen or twenty years, and most within fifty, and many of the older loans should be periodically falling due for repayment. This should render the amount of outstanding loans each year almost stationary and in many cases owing to further undertakings increase also. As these loans become redeemable and fresh loans have to be placed on the market, it is found that the investor is not content to accept the same rate as before, or requires the stock at a much lower price of issue resulting eventually in the failure of Corporation loans. In the following passage the writer sounds a note of warning to the Corporations whose borrowing proclivities have already over-reached the cautious limit.

As a general principle the acquirement by the local authority of undertakings, affecting the public welfare and carried on by the State for the general benefit, is a good one, even if such undertakings are carried on at a temporary loss. In practice it has yielded excellent results in the principal cities of Germany and other countries. But there is the danger, which is already very evident in the immense increase in loans, that local authorities—especially when they are controlled by men with a low sense of responsibility—will build up a debt out of all proportion to the resources of the town, and render the burden of repayment by a future generation an almost impossible one. In many comparatively small towns there are already to be seen imposing town halls and council chambers, elaborate parks, and other public buildings, and although adding lustre to the appearance of the town, and giving a certain dignity to the mayoral or municipal office, are almost entirely unremunerative and represent no small proportion of the local rate burden. In this respect local authorities may well take warning from the results which attended the too free borrowing of money for public works in our Australian colonies and in most of the cities of South America. The "over development" of a town is no whit less serious to its future state than is the "over development" in the case of a child.

NO RELIGION HIGHER THAN TRUTH.

The Theosophical Review in its July issue has an interesting discussion on "No Religion Higher than Truth." Mr. Alexander Fullerton contends that deceit is morally such only when others *have a right to know the truth*. This rule is just and fair and preservative of all rights. He cites two practical illustrations of cases where the right to know the truth does not exist—the case of the religious persecutor and the man who seeks to know secrets given in confidence. In the former case a man is "quite at liberty to withhold his convictions or to put forward their opposites, since the questioner is demanding something to which he has no right and is supporting an illegal question with an illegal threat." An attitude of ignorance is excusable, nay ever binding morally, on the person who has been trusted with a secret. Really he knows nothing that he can state, therefore is in the position of a person who knows nothing at all. It is no lie then to maintain an attitude of perfect ignorance.

Mrs. Besant sees in this argument a blow at Truth, for it seems to exalt personal safety and life above truth. Where will martyrdom come in if every persecuted man may shield his liberty by a lie. With regard to secrets, we may guard them by silence, but not by falsehood. The best thing of course is to give no indication to others that one is in possession of a secret. She says:—

Believing, as I do, in the law of karma, I cannot believe that a temporary trouble due to truthfulness is as serious a matter as the poisoning of the stream of human trust and confidence by telling a lie. The persecutor may kill my body, but why should I add to this evil of his causing, the worse evil of increasing treachery and deceit within human society? Shall I not do more to neutralise the results of his evil on society by answering it with fearlessness and honesty, than if I answer it with cowardice and double-dealing?

THE CASE AGAINST IMPERIALISM.

The *July Arena* publishes a symposium on "Why I am opposed to Imperialism?" It consists of four short statements of conviction by four public men of America. President George Mc. A. Miller says that it is an abandonment of the high ideal of the Declaration of Independence and the doctrine of political equality. Instead of this ideal, what ideal have we? None at all, for *Expansion* is no ideal. It may be good enough for England and Russia, for it is consistent with their governments, but the republican ideal of the United States cannot be reconciled with expansion, even though it be called 'benevolent assimilation.'

Mr. Bolton Hall looks upon the annexation of the Philippines as 'criminal aggression' on the part of the nation. It is as wrong therefore as an individual setting fire to his neighbours' houses and slaughtering thousands of them. All Americans are responsible for this sin, for partnership does not diminish guilt. Among the consequences of the new expansion movement are official disregard of the rights of speech and press; censorship and suppression of news; the growth of the military spirit with its glorification of brute force; contempt of the rights of humanity; and that national brag which "ridicules morality, cows religious teaching, and is the forerunner of national decay." He sums up: "Imperialism's other name is *Brutality*; and its end, if unchecked, is for the victor to deliver himself over to oppression and for the conquerors to find themselves enslaved."

Prof. Thomas E. Will is even more violent in his denunciation of the Cuban policy and maintains that it is hypocrisy and deception to speak of the Christianisation and civilisation of the Filipinos, while the real object was to find a market for surplus products, as Senator Defew declared in the Philadelphia convention without being challenged. Despotism in the Philippines will lead to despotism at home. Already corruption, coercion, the power of the trusts, the fawning upon royalty, and similar things are signs of the degradation of public life. Imperialism has proved a failure in the case of Greece and Rome, and is sure to prove a failure in the case of England, for is not the British Empire tottering to its fall?

Mr. Ernest Crosby opposes the imperialistic course of the United States for these reasons: (1) it is based on physical force (2) it fills the world with hatred (3) it is founded on a false pride of race (4) it is steeped in cant and hypocrisy (5) it distracts our attention and our material resources from the problems that beset us at home.

CIVIL JUSTICE IN INDIA.

By way of commenting upon and drawing a corollary from the open "petition" which appeared in the January number of *East and West* over the pseudonym "Ramji Bin Rowji," Sir Roland K. Wilson Bart contributes an interesting article to the July number of that magazine on the administration of Civil Justice in India. The passage quoted by the writer from the petition is the following :—

"That Code, my Lord, is to the villagers like a burning fire fed by four other fires—the Court Fees Act, the Stamp Act, the Registration Act, and the Limitation Act. I ask you again to place yourself in the position of a poor ploughman and to say whether it is fair to expect him to know all these laws as to the meaning of which even Full Benches of the High Court differ—laws which the Government itself cannot understand without the help of its law officers—*laws which involve the payment of innumerable fees at every turn, laws which make the Courts inaccessible except to those who can pay, and which enable the man with a long purse to spin out litigation to an inordinate length and defy the humble poor*—this last alone a problem by the way, which your Legal Member confesses he cannot solve."

The complaint of the petitioner is twofold—lack of proper promulgation and the fiscal accessories of the Civil Procedure Code. With reference to the first Sir Roland says :—

"Mr. Ramji has probably good reason for his suspicion, that the vernacular translations of Indian Acts would be unintelligible to the masses, even apart from the fact that less than 2 per cent. of the population are able to read. Speaking generally, there is evidently too much of what Bentham used to call dog-law ; if you want to teach your dog to abstain from doing something, you wait till he does it and then beat him."

And passing on to the second he observes.

"The ordinary layman has no concern with it until actually in sight of a lawsuit, and then he ought to find, though as a matter of fact he does not find, officials ready to give him all necessary assistance. If I cannot read, or fail to understand a Railway Company's time tables, I can obtain, without fee, at the railway station itself all necessary information about the trains that are to convey me to my particular destination. In like manner if I enter a civil Court with no previous knowledge of its procedure, knowing only that I have suffered what I imagine to be a wrong and want redress, I ought to be met, as a matter of course, by some official with sufficient leisure, brains and civility, to explain to me what I ought to claim and in what form, supposing my story to be true, what sort of evidence I must be able to produce, how I am to get my case set down for hearing etc."

Sir Roland Wilson thinks the principal code viz., the Civil Procedure without its subsidiary fires, the Court Fees, Stamp, Registration and Limitation Acts would be what a well managed fire ought to be, a good servant instead of a bad master. About the system of charging court fees, the writer remarks as follows :—

"While the system inflicts wholly undeserved loss on the litigant, or would-be litigant who is in the right, it is also apt to punish very much in excess of his deserts the one who has put himself in the wrong, it may be through inevitable ignorance of law caused by the Government's own neglect."

The writer would like to see the champions of the Indian ryot summon up courage to demand, on his behalf, something better than the old *Panchayats* ; an instalment, if not the whole, of some such programme as the following :—Retention of the benefits, without the charges, or with greatly diminished charges, under the Registration Act ; Munsiff's Courts more thickly dotted over the country and not too overburdened with work to inquire into the merits of undefended suits ; Completion of half finished Code of Substantive Civil Law by consolidating the meagre and in-harmonious enactments which now regulate the marriages, succession etc. of those who do not desire to be governed by Hindu, Mahomedan or any other set of rules deduced by traditional exegesis from ancient Scriptures.

The writer would have for the legal member of the Government of India a man having an Indian domicile. He further suggests that *panchayats* might be utilized to better purpose as petty legislatures than as juries. As regards a poor man's right to sue or defend *informa pauperis* he observes that the answers hitherto given, both in England and India, have been shuffling and inconsistent.

"In both countries the right of the poor has been recognized in theory by permission to sue or defend *informa pauperis*, but in both countries the permission has been fenced round by such a net work of obstructive provisions as to be in practice very little used. In both countries criminal justice is more nearly gratuitous than civil, without any solid reason for the distinction ; and in both countries the result has been to force into the petty criminal tribunals a great number of disputes which should have been and otherwise would have been brought into a civil court. But while the conditions are generally similar, they are as we should expect rather more unfavourable to the poor litigant in British India than in partially democratised England. For one thing, the state expenditure on civil justice is in England considerably in excess of the suitor's fees received ; whereas in India, taken as a whole, it is more than covered by the receipts." He would treat suits and defences *informa pauperis* as the rule instead of the exception.

AN OLD ETONIAN INSTITUTION.

Educationists will read with no little interest an article on An Old Eton Institution in the *Humane Review* for July. It is an account of the correspondence between the Humanitarian League and the authorities of Eton regarding the sport of hare-hunting commonly known as the Eton College Beagles. It is a recreation in which a hare is hunted by a group of scholars with the College Beagles. It would appear to be highly prized by Etonians. We extract below an account of one of these hunts by an eye-witness.

On February 4th, 1899, being in the vicinity of Eton, I had an opportunity of seeing one of these hare-hunts, and I will give a short and exact description of what took place.

At 3 o'clock, some 180 boys, many of them quite young sallied forth for an afternoon's sport with eight couples of the College Beagles. A hare was found at 3-15 near the main road leading to Slough. It was chased through the churchyard and workhouse grounds of this town, into a domain dotted with villas, called Upton Park. Escaping from this spot, it ran towards Eton, but soon doubled back to Upton Park, the numerous onlookers in the Slough road, lustily shouting at the dazed creature all the time. These circular chases were thrice repeated, the hare always getting back to Upton Park.

Twice did the animal come within a few paces of where I was standing, and its condition of terror and exhaustion was painful to behold. The boys running after the hounds were thoroughly enjoying the thing, and two masters of the College, I was told, were amongst them. Now for the final scene.

The hare, which had been hunted two hours, having got into a corner at Upton Park, which was bounded with wire-netting, was seized by the hounds and torn. The master of the pack then ran up, got hold of her, and broke her neck. The carcass was handed to one of the dog-keepers, who cut off the head and feet, which trophies were divided among the followers. The keeper with his knife then opened the body, and the master, taking it in his hands and holding it high above the hounds, rallied them with cries, and finally threw it into their midst, as they had, in the language of the *Eton College Chronicle*, "thoroughly deserved blood."

I make no comments upon these doings; I only say that I think the British public ought to know how boys are being trained at our foremost school in respect to the cultivation of compassionate instincts towards the beings beneath us.

In 1897 the Humanitarian League addressed an open letter to Dr. Warre, the Headmaster, but received no reply. With the like result the League appealed to the Provost of Eton as chairman of the Governing Body. Subsequently Lady Florence Dixie wrote to the Headmaster who stated that until the hunting of wild animals was forbidden by law, he could not interfere with the Beagles. In February this year the League took up the

matter again and sent up a memorial to the Governing Body, signed by many influential people, among whom were Messrs. Passmore Edwards, Keir-Hardie, Frederic Harrison, Herbert Spencer, G. J. Holyoake, Sir. W. Wedderburn, A. R. Wallace, and W. M. Rossetti. One sentence from the memorial it will be enough to quote:—

Without entering on the general question of the morality of field sports, as practised by adults, we would express our conviction that it cannot be otherwise than demoralising for the young to be encouraged to seek amusement in the infliction of pain on animals, and that the permission granted to Eton boys to indulge in the sport of hare-hunting, and to publish in the school journal a record of the "breaking up" of hares, the "blooding" of hounds, and other incidents of the hunting-field, is greatly to be deplored.

In reply to this memorial the Governing Body resolved that it was a matter in which they ought not to interfere with the Headmaster's discretion. The League had then to address Dr. Warre once more. On April 7th it sent up a letter in which the Headmaster was requested not to discontinue the Beagles but to substitute for the hare-hunt a drag-hunt, "which, as experienced sportsmen have testified, is capable of giving the fullest amount of healthful and manly exercise, without the taint of cruelty." The letter proceeds to remind the Headmaster that he and the Provost were members of the Windsor and Eton Branch of the Royal Society for the Prevention of Cruelty to Animals, and that the doings of the Eton Beagles had been stated by the Central Executive of the society to be "contrary to the principles of the parent society." Dr. Warre replied to the effect that the boys were not cruel, though they might use such expressions as "breaking up of hares" and "blooding of hounds," that the hunting of wild animals is not cruelty, that such hunting is not demoralising to the youth of the nation, and that the R. S. P. C. A. to which the Provost and he had the honour to belong had not condemned the hunting of wild animals. The League rejoined that that its complaint was not that the dead hare was devoured by the hounds as Dr. Warre assumed, but that before dying the hare undergoes a process of prolonged torture by exhaustion, and that it is often torn and worried by the hounds before being put out of its misery by the hands of the huntsman.

The writer of the article is naturally angry and concludes that if the R. S. P. C. A. does not take proper steps in the matter, "it must be held directly responsible for the continuance in the twentieth century of an old Eton institution which would disgrace a tribe of savages."

CHITRALEKA—THE HINDU LADY ARTIST.

Mr. C. Raja Raja Varmah brother of Raja Ravi Varmah the celebrated artist of Travancore contributes a short paper to the July number of "The Indian Ladies' Magazine" on the subject of "Painting" in the "Indian Women and Fine Arts" column of that magazine. From the frequent reference made to painting and pictures in ancient Hindu literature he concludes that the art was known and practised in India from the remote ages, and further observes :-

"A knowledge of painting appears to have formed part of the general education of princes and even of princesses. We read of Chitrakalas or picture galleries in the Palaces of the great and we know they could not have existed unless there were good painters and pictures. We read too of Kings and Queens as often engaged in delineating the portraits of their absent friends and loved ones."

The most interesting portion of Raja Raja Varmah's article is the account given of Chitralekha the first instance of a lady artist we come across whose name occurs in the beautiful episode of the loves of Usha and Anirudha in the Mahabharata. She is described as a portrait painter of extraordinary memory and command over her brush. She could paint from mere memory, portraits of persons she had only once seen, with lifelike resemblance and truth.

"Usha was the beautiful maiden daughter of Bana, a powerful Asura chief. One day it so happened that she saw in a dream the vision of a handsome youth with whom she fell desperately in love. When she awoke, not having found the young man by her side she gave free vent to her grief and despair, and refused to be consoled by her maid servants unless he was restored to her in flesh and blood. They were at their wit's end, not having known anything about the youth with whom their mistress was madly in love.

"They therefore put their heads together and hit upon a plan to solve the mystery. They called in to their aid their friend Chitralekha whose skill as an artist they resolved to utilise. She accordingly appeared with her paint box and panels on which to paint, and after having received a general description of the youth from Usha, set to paint the likenesses of such of the demi-gods and heroes of her time as were remarkable for their masculine beauty and strength.

"Portrait after portrait was executed, shown to the love-sick maiden and discarded, until at last the figure of Anirudha stood out from the panel in all the splendour of his divine beauty, under the magic touch of Chitralekha's brush. Usha was transported with joy at the sight of her lover's portrait and she loaded her friend the artist with costly presents. I have nothing to do with the sequel of the story which narrates the clandestine meetings between the pair and the deadly war which followed discovery by Bana of this intrigue."

Whether these refined feminine characters did really exist or were only the inventions of poets,

it does not matter to us much. They give us a picture of Hindu society and civilization as it existed in those pre-historic times.

We find that the women of ancient India were free from many of those prejudices which now stand as barriers against knowledge and progress. A great gulf, no doubt, separates them from their daughters of to-day, with their freedom and high culture their love of nature and the arts. How many ladies of our present times have been taught to admire the beauties of nature! I think very few would pause to look at a brilliant sunrise or sunset, or a lovely landscape, with distant hills and towers of a temple peeping above a bright mass of foliage and the village tank in the foreground shaded by spreading banyan trees. Is it not, I ask, a sad spectacle not to find a single canvas by a native lady, among many contributed by European ladies, to the Fine Arts Exhibitions of the day? It is futile to expect to approach the European standard of civilization, after which we are striving, unless, along with progress in other directions, we attempt to revive the dormant taste for the fine arts among our countrymen and women. A more useful and more innocent occupation than drawing and painting it is difficult to find for our young ladies who have not much to do at home. A knowledge of the art will not fail to refine and elevate their souls and at the same time open out fresh methods of instruction and enjoyment of life.

HYMN OF THE SUN

[FROM THE "OPEN COURT."]

[The interest of these lines lies in the evidence they afford that the Gayatri serves a modern Christian as a devotional exercise just as well as it served an Indian five thousand years ago. There is no religion which might not adopt it. It is truly the *leitmotiv* of the universe, just as the swastika—of which the hidden significance was probably exactly the same—is the universal symbol. Editor Open Court.]

Thou mighty sun diffusing
Around a light divine,
I view thee, but am musing
On Him who bade thee shine!

Thou, over plain and mountain,
Shed'st thy pervasive beam;
Thy God, the living fountain,
Thou, but a borrowed stream.

Shine on, then, wide extending
His glory o'er the earth,
I view thee, lowly bending
To Him that gave thee birth.

Shine on, majestic pouring
Thy day-spring's golden sea;
I hail thee, still adoring
The God who bade thee be.

DEPARTMENTAL NOTES.

Educational.

BEHAR AGRICULTURAL SCHOOLS.

The following correspondence has passed between the Director of Public Instruction and the President of the Behar Landholders' Association on the subject of Agricultural Schools in Behar :—

From A. Pedler, Esq., F.R.S., C.I.M., Director of Public Instruction, Bengal.—To the President of the Behar Landholders' Association,—(dated Calcutta, the 22nd January 1902.)

Sir,—I have the honour to state that at a Conference on Education held at Simla in September last, under the presidency of His Excellency the Viceroy, the following Resolution was passed :—

"56. That it is for consideration whether a school for the practical teaching of agriculture to landholders might be instituted by Government"

2. The Government of India have endorsed this Resolution and make the following remarks in this connection :—

"It should, of course, be the policy of Government to give all possible encouragement to students of this class, and the Governor-General in Council would be glad if consideration were given to the practicability of a further development in the establishment in those provinces where it may be found desirable, of a special school of somewhat superior class for the sons of landholders in which instruction, following perhaps to some extent the ordinary school course, would include practical training on the subjects, such as agriculture, land surveying and farming, book-keeping, which would be of use to the student in after-life."

I am now desired by the Government of Bengal to invite an early expression of your opinion on this subject, and to ask for what class of students you are of opinion such an institution could be provided, and what scale of fees could be charged. I am also to ask whether you think that parents of the class in question would be likely to send their sons to such a school, and whether the education should be through the medium of the vernacular or English or in the former during the preliminary stages of the course, and then in the latter.

I would also ask if you are of opinion such a school should be started, whether you can suggest any conve-

nient locality as a centre for the whole of the students from Bengal, and whether you are of opinion any support from private liberality could be expected towards such a scheme.

In reply to the above, the Secretary to the Behar Landholders' Association sent a letter to the Director, the concluding portion of which runs as follows :—

I am desired to point out that even if we admit the purpose of the new scheme of Primary Education and bifurcation of studies in the English High Schools is that of giving a more practical turn to the general system of early education, and not that of preparing boys for learning any particular trade or profession, even if we admit that "the first aim of these reforms is here as it has been in Europe and now under similar circumstances in Great Britain, to train and improve the intelligence of the young, whatever may be the future occupation of their life; even if we admit these propositions for the time being, and leave out of consideration the recommendations of the Famine Commission of 1878, or the resolutions of the Agricultural Conference of 1893, the Committee of the Behar Landholders' Association still fail to see any reasonable grounds for the exclusion of agriculture as an alternative subject in the scheme of bifurcation of studies prescribed for High English Schools. For, the highest educational authorities consider that merely as a means to develop the faculties of the youthful mind, or to quote the exact words of the Government of Bengal, to "train and improve the intelligence of the young" agriculture as a subject is at least as valuable as any other branch of science, physics, or chemistry for instance.

The Committee of the Behar Landholders' Association believe that the distinction made between town and village schools in this respect furnishes a clue to the reasons which may have weighed with the Government in leaving agriculture out of the curriculum of all High English Schools, which are generally located in towns alone. But it is possible to exaggerate the difficulty of teaching agriculture in large towns. The largest town in Behar is Patna, and within the Municipal limits of Patna all kinds of crops are grown on a small scale—paddy, wheat, oats, barley and maize, sugarcane, tobacco and poppy, the different varieties of cereals and vegetables and tubers, in fact, almost all crops known in these parts of the country, so that the advantage possessed by purely rural areas are but nominal for the purpose in view, and the facts of agriculture and agricultural conditions abound as much in and in the immediate neighbourhood of all mofussil towns as in the more outlying village areas. Furthermore, the Committee of the Behar Landholders' Association believe that it will be easier and less costly to provide every High School with a garden and the necessary implements and samples required for a course of practical instruction in agriculture, than to provide a well equipped laboratory for the teaching of chemistry and physics, for instance, nor need there be any difficulty in finding capable teachers, with the agricultural classes at Sibpur in full working order. Finally, the Committee of the Behar Landholders' Association join with the Government of Bengal in the belief that a good system even if badly conducted in the beginning, would in the long run yield better results than a system which is by itself unsound or halting.

Literary.

A BENGALÉE LITERARY CONGRESS.

The Calcutta correspondent of the *Hindu* writes:—The cause of Bengalee literature is looking up. Some of the best intellects of this province are now enthusiastically devoting themselves to the improvement and development of their mother tongue and national literature. The solitary versatile Bengalee genius of the time, Rabindra Nath Tagore, is a devout worshipper at the temple of the goddess presiding over the destinies of the only vernacular literature in India which promises to have a glorious future. One great reason why there are at the present day so few writers of mark in English in the Lower Provinces is that most of the best literary talents now prefer to cultivate and write in their own language. Within the last decade a number of Bengalee Literary Associations have been started which are more infrequently constituted and more liberally supported with funds than any political Association of the day. And now, a number of literary men have conceived the idea of holding an annual Bengalee Literary Congress in the first month of the Bengalee year. It will be somewhat in imitation of the National Congress. There will be speeches delivered by the delegates who will be only poets, authors, journalists and writers of note in Bengalee. The subjects to be brought forward for discussion and conversation will relate to the progress of Bengalee literature and the means to be adopted for its further and increasing improvement. An exhibition will be held in connection with the Congress at which various manuscripts, autographs, and other relics of the great Bengalee authors and literary curiosities of sorts will be exhibited. Efforts will be made to create *esprit de corps* among the authors, so that union among them might lead to great literary undertaking being planned and carried out unitedly by them. The Congress will have a Committee of its own which, among other powers, will have that of conferring literary degrees on Bengalee literary characters of distinction. There will be performances of the best Bengalee dramas, recitations from the best Bengalee poets, and songs of the best Bengalee composers, to be sung by the best vocal musicians among the Bengalees. It will altogether be a unique literary festival, the like of which India has not witnessed in recent times. It will not only be a very enjoyable gathering but one that is calculated to be pregnant of highly beneficial results. The foundation of a Bengalee Literary Congress will in a manner, be a proof of the giant

strides Bengalee literature has made in the course of the last fifty years. It ought to inspire Madrasses and other races in India to improve each their own vernacular literature to the best of their might.

LITERARY TASTES OF HER MAJESTY THE LATE QUEEN EMPRESS VICTORIA.

Our late beloved Queen Victoria had very decided literary preferences, and although she was deeply read in French and German literature, her favourite authors were all, as was only right and proper, great-hearted Englishmen and women. It is well known that the Queen's religious reading was biblical and devotional rather than controversial, and the sermons of Dean Stanley, Dr. Norman McLeod, and Robertson of Brighton were most highly esteemed by her. Her especial favourite was Robertson's "The Sympathy of Christ," though in the hour of her greatest sorrow it was to Tennyson she turn for consolation. "Next to the Bible, 'In Memoriam' is my comfort," she said to the poet when he saw her the first time after the death of the Prince Consort. The Queen's favourite novelists are said to have been Scott, Dickens, and Thackeray, and she deeply appreciated Charlotte Bronte and George Eliot, being particularly fond of "Jane Eyre" and "Adam Bede." Mrs. Oliphant and Marie Corelli were also warmly admired by the Queen, who found the former's "Little Pilgrim in the Unseen" of absorbing interest. Her favourite historian was Macaulay, and amongst modern poets, after Tennyson, Burns, Watson, and Browning occupied the chief place in Her Majesty's estimation. Apropos to Robert Browning a rather amusing story is told in connection with the poet's master piece "The Ring and the Book." The Queen had asked Sir Theodore Martin to read it aloud to her. Before doing so, Sir Theodore made a cautious study of the poem and placed marginal notes against passages of doubtful propriety. The marked copy chanced to fall into the hands of a rather thoughtless court lady. "I have so enjoyed this wonderful work," she said to a friend, "and it has been such an advantage to read it after the Queen for she had placed marks against the most beautiful parts, and oh, what exquisite taste, the dear Queen has!" She added, pointing to the danger signals of Sir Theodore Martin:—*Canadian Magazine*.

HENRY DRUMMOND'S MAXIMS.

The career of Henry Drummond affords a fine illustration of the study of the divine will. His biographer tells us how for some years he was uncertain about the issue of his life. During that time he studied carefully the teaching of the Bible upon the will of God. The result of his study he summarized in these eight maxims, which he wrote upon the fly-leaf of his Bible.

To find out God's will:—

1. Pray. 2. Think. 3. Talk to wise people, but do not regard their decision as final.

4. Beware of the bias of your own will but do not be too much afraid of it; God never unnecessarily thwarts a man's nature and likings, and it is a mistake to think that His will is the line of the disagreeable.

5. Meantime do the next thing (for doing God's will in small things is the best preparation for knowing it in great things.)

6. When decision and actions are necessary, go ahead.

7. Never reconsider the decision when it is finally acted upon; and

8. You will probably not find out till afterwards, perhaps long afterwards, that you have been led at all.

Legal.

THE SOUL OF JUSTICE

What subtle sense of Justice do I feel?
 What philosophic calm of mind and heart
 Comes o'er my soul, when, undisturbed by thought
 Of legal strife, I pass, serene, beneath
 The carved stone portals of the Judgment Hall,
 Where sits, dispassionate and calm of mind,
 And weighing, pro and con, the argument,
 For plaintiff or defendant, judgment gives,—
 A human judge, dispensing Law Divine.
 And as I drink the words of wisdom in,
 And feel how hard he strives to guide aright
 The panelled jury's minds to wise decide,
 I feel that here, upon the earth, is found,
 At last, if not all wisdom, yet all good,
 And minds intent on Equal Rights to all.
 Yet, well I know, despite insistent Peace,
 Which broods o'er all proceedings legal here,—
 Which dominates the souls of angry men,
 As permeates the chilly atmosphere
 Of morn the circumambient sun's ray,
 That evil thoughts are given audience,
 Full frequent, as from man to man is spoke
 The word, half jest, half earnest, in its weight,
 'Till one might think the air'd be saturate
 With hurtling thoughts and angry, fearsome looks.
 Despite these floating human clouds perverse,
 Invisible, yet recognized by all,
 The mighty power of Justice dominates
 The, entire auditorium and throng;
 And hushed is every voice, and stilled each breath,
 When, after long arduous, nay, fierce
 Attempt to make the wrong appear the right,
 All eyes are bent and ears are turn to learn
 The verdict reached,—triumphant Right enthroned.
 Here am I led to grant Divine instinct
 To human nature; which, thus, wills that Man
 May reap his just deserts for acts performed
 While passing through this modicum of Life.

Mr. I. Jay Potter in the *Green Bay*.

SOME POINTS OF FRENCH RAILWAY LAW AND CUSTOMS.

1. *Claims to a Seat*.—The right to a seat, which has been engaged by placing upon it a coat or some other article, has actually been legalised by a recent test case in the French law courts, while this right in England depends of course solely upon custom, and cannot be enforced. Not only this, but in France each passenger

is legally entitled to the use of that portion of the rack and floor immediately above or below his seat.

2. *Control of Windows*.—English travellers often complain of the tendency of French travellers to keep the windows closed unnecessarily. It is the best policy to put up with this annoyance, as an appeal to the guard will not as a rule be successful. His sympathies are likely to be with his compatriots, who regard the love of English people for open windows as a foolish fad, and one, too, which is dangerous to health.

3. *Smoking Carriages*.—The rule for smoking on French railways is the reverse of that which obtains in England. Though carriages for *fumeurs* are provided, smoking is permitted in any carriage with the consent of the occupants, and in practice almost every compartment except those labelled *dames seules* is a smoking one.

4. *Tips to Porters*.—English travellers are apt to inveigh against the greed and rapacity of French porters, especially at Paris stations. This is probably due to ignorance of the fact that at Paris *termini* the *facteur* who fetches a cab from outside the station—and this is usually necessary—is entitled to a gratuity, and in Paris one franc is customary. This being the case, the traveller who presents him with a few coppers (which would be civilly accepted at a London station) must not be surprised if he is confronted with black looks.

5. *Customs Examination*.—At Calais, Boulogne, or Dieppe, the traveller should be on his guard against accepting the services of a man in semi-uniform (not a porter) who will offer to see the traveller's luggage through the Customs. His services will cost you a fee of 2s. 6d.—*Travel*.

WHEN MAY A DEBTOR CHALLENGE THE CORRECTNESS OF HIS CREDITOR'S ACCOUNTS.

A common popular fallacy holds that a debtor may ignore all accounts sent in to him, and wait until the case comes on for hearing at the County Court before he takes any notice or makes any explanation as to why he has refused to pay the account. It frequently happens that when this type of individual has any work done for him with which he is not thoroughly satisfied, he does not condescend to write or call and explain the position of affairs. He waits till the case comes into Court, and then and then only he enters his protest. But County Court judges invariably make it a rule to find for the plaintiffs in such actions, and to lay it down that it is the duty of a debtor immediately he has an account rendered him that he should take exception to it if it is not in order and correct in every detail. If it is simply ignored, and the other party is allowed to bring the case into Court, this is the best way of insuring its having to be paid in full, as the judges hold that pleas put forward for the first time in Court are not a defence.—*Speaker*.

Trade and Industry.

JAK FRUIT.

Professor G. Marshall Woodrow, late of the Indian Botanical Service, contributes the following on the Jack fruit to the *Gardener's Chronicle* :—

The Jak fruit (*Artocarpus integrifolia*) has a peculiar odour and flavour which requires training to appreciate; hence, although delicious to those who acquire the taste in early life, the matured traveller is usually very easily dissatisfied unless the specimen offered be one of those rare variations with an odour differing greatly from the normal. Flavours are indescribable, but that of an over-ripe melon approaches somewhat the flavour of the Jak. While growing, the immense compound fruit, about 20 lb. in weight, but often much heavier, hanging from the naked stem or large branches, is an object of special interest. The tree needs an equable warm and moist climate, and does not object to a long season of heavy rain, and a longer season of dry soil if the air be moist. The climate of the Western Ghats of India, at an altitude of 1,000 to 2,000 feet is specially favourable. Here the moisture laden breeze from the sea every evening, even in the season, brings water enough to bedew every leaf, and the hot north east wind is shut out.

The Jak has a name in every one of the many languages of India and Ceylon, but none of them approaches the sound of its familiar appellation, and that was probably given by our early voyagers, from the resemblance between its top outer covering, studded with raised points, and the Jack coat-of-arms, used by solidiers in mediæval times, and it is more probable that after months of salt pork and beef, our sailors enjoyed the rather fulsome flavour of the massive fruit, and gave it the name most familiar to them. Among the many vernacular names of the Jack, *Artocarpus integrifolia* is the most widely known.

INDIA'S MINERAL RESOURCES.

The *Pioneer* publishes an article from its London correspondent giving an interview with Mr. Jamsetjee Tata regarding the exploitation of India's mineral resources. Mr. Tata says that American and German experts are astonished at the richness of iron ore deposits in his Central Provinces concession and expressed confidence that when the industry is organised it will take rank with the most valuable iron deposits in the world

Mr. Tata is already communicating with leading capitalists likely to join his Syndicate and shortly lays down experimental plant costing £ 20,000 or £ 30,000. It is estimated that the enterprise if successful will give employment to thousands of miners and also cheapen steel in the Indian market. Mr. Tata is also taking steps to revive copper mining in the Central Provinces.

A JAPANESE WELTAUSTELLUNG.

The Consul-General for Japan in London has given information to the effect that the National Industrial Exhibition which the Imperial Government of Japan will hold at Osaka in 1903 will present some novel and interesting features, to one of which in particular the Japanese Government wishes to call attention. That is, the establishment of a special building for the free exhibition of samples of such articles produced or manufactured in foreign countries "as may be of value for purposes of comparison or reference in the way of industrial improvement." The primary object aimed at is thereby to afford the Japanese manufacturers an opportunity of studying the latest products of Western invention with a view to the improvement of Japanese industries.

STUDENTS FROM NEPAL TO JAPAN.

We are glad to note that Nepal has also been influenced by Western ideas of progress. The Darbar is sending out eight students to Japan for technical training; the students will receive education at the expense of the Darbar and on return will be employed in the State service. Nepal's mineral resources are great if the Darbar get its own men trained and their resources may be developed to the great advantage of the people.

AN INDIAN INVENTOR.

It is extremely gratifying to note the triumphs that the Indian intellect is achieving in the realm of practical science. The latest of these is reported from Almorah. Pandit Sri Krishna Joshi of that city has invented a cooking range by which it is possible to cook by the aid of sunlight. The apparatus does not weigh more than 15 maunds. With it, the inventor has also been able to work a small steam engine just exactly as if worked by means of coal. The apparatus is at present within the reach of the wealthy only, but we dare say the Pandit will be able to devise means to bring it within reach of a much larger community, in which event it would certainly create some sort of an economic revolution in the country.

Medical.**DIABETES.**

Diabetes, writes a medical paper, is a disease characterised by an excessive flow of urine. There are two kinds of this disease. In the more common the urine is found to contain a large quantity of sugary matter. Immoderate thirst and a voracious appetite are also usual accompaniments of this disorder. The body becomes emaciated, and there are usually aching pains in the back and loins. The regulation of the diet forms by far the most important part of the treatment of this disease, care being taken to exclude, as far as possible, all articles of food containing sugar. Animal food ought, therefore, to form as large a portion of the diet as available. All kinds of fruit must be avoided, as well as vegetables, particularly such as contain a large quantity of starch, such as potatoes. Bread, too should be used very sparingly, and stale bran bread being preferable to the ordinary white. Beyond dieting, efforts should be made to tone the system by abundant exercises in the open air, the use of tonics, and such medicines as tend to soothe the nervous system. An exclusively milk diet persevered in, is said to have been successful in effecting cures in several cases. The state of the skin is particularly to be attended to, and daily ablutions of the whole body in warm or cold water is recommended. The Turkish bath, it is believed, might possibly prove useful in this disorder. Flannel should be worn next the skin.

DIAGNOSIS OF DIABETES.

Dr. H. S. Stark calls attention to the following signs and symptoms of diabetes mellitus which are not discussed in most of the text books:—Periodic attacks of headache in obese subjects over thirty-five years of age; extreme and lasting fatigue after a short but violent exercise, and prolonged fatigue, say, of one or two days' duration following a slight exertion; slowly failing vision in the aged or quick failing vision in the young; certain signs referable to the mouth, such as acid saliva, receding gums, fissured and extremely reddening tongue. This is a combination frequently encountered in middle aged women. Two varieties of symptoms are referable to the heart and its functions—the one set simulating an attack of agina pectoris and a second set presenting the physical signs of arteriosclerosis, or of cardiac hypertrophy. This latter set of cases may be met with not infrequently in obese male subjects with florid countenances and with otherwise healthy appearances. Another train of symptoms is referable to the nervous

system. There are present marked nervousness and physical disturbances; the patient is usually an old man of an ungovernable temper, is easily irritated, and, besides, is impatient, has a morose expression and lacks cheerfulness. Still other symptoms, which should put the clinician on his guard, are premature greyness, premature sexual weakness, diminished patellar reflex, slow healing of wounds, cramps in the calves of the legs in the morning hours, accompanied by muscular weariness.

SLOW EATING.

There is a prevalent idea that slow eating is very favourable to digestion, but as a matter of fact, this is largely fallacious. The important point is not that we eat slowly or fast, but when we do eat, we masticate with energy. Of course, where the haste is due to some mental anxiety, this may injuriously inhibit the secretions. Slow eating begets a habit of simply mumbling the food without really masticating it while the hurried eater is inclined to swallow his food before proper mastication. Hence, hurried eating is bad but rapid mastication is advantageous. It concentrates our energies on the act in question, and hence more thoroughly accomplishes it. Moreover, chewing stimulates the secretion of saliva in the most favourable manner. These various points are so commonly misunderstood that they really demand our constant attention.—*Health*.

CURE FOR SLEEPLESSNESS.

Effectiveness is claimed for yet another remedy for sleeplessness. Dr. Von Gellhorn employs a band of wet muslin, about 18 in. wide, wound around the lower part of the leg. The bandage is covered by gutta percha tissue and the stocking, and in some cases is replaced every three or four hours. The effect is to dilate the vessels of the leg, thus diminishing the blood in the head and producing sleep.

ABSENT MINDEDNESS.

Is absent-mindedness a symptom of brain failure? The answer to that question, says the *Medical Press and Circular* is clearly that it may or may not point to some more or less serious underlying degeneration of the brain tissues, and that in each individual case it must be left to the sufferer to settle the matter with the help of his physician. The finds for one year in London cabs and omnibuses, as officially reported, included 850 sticks, 19,000 umbrellas, 267 rugs, 742 opera glasses, 926 articles of jewellery, 180 watches, 3,239 purses, several dogs, birds, bank notes, and cats. It seems inexplicable how any person could take out a watch in order to leave it lying on the seat of a cab, and no less incredible that a cat should be left behind in a hackney coach.

Science.

EDISON'S INVENTION.

Not content, observes a writer in the *Inventors Review* with harnessing the greatest motive power known to mankind, perpetuating the human voice, picturing motion, and bringing the remotest parts of the earth into instant communication, Mr. Edison now proposes to crush mountains to dust, and—of course as a commercial consequence—into £5 notes. To crush mountains to dust and to separate the substances of which they are made, in the same way as a grain merchant does his grain, is, in short, a description of Mr. Edison's latest invention; and, like the inventions of all geniuses, it is so simple when applied that one is inclined to be foolish and, say, "Anyone could think of that."

Mr. Edison has taken many laborious years to do so and has spent a large sum in his effort.

The result is an invention by which the crude earth is dropped into a machine and reduced from boulder size to dust; then the properties of which it is composed (iron, gangue, gold, zinc) are separated magnetically, and so separated, used for the purposes required. The immediate application of the invention is in the separating of the crude ore and extracting from it the pure iron.

MR. EDISON'S METHOD.

The process is as follows:—The earth in its natural state is dropped from a height of 10ft. on to a number of rolls, beginning with gaints rolls, 8ft. in diameter and 18in. apart, and ending with closer-fitted smaller rolls underneath. These rolls are set revolving at a great speed, which delivers terrific blows to the falling earth until it finally is crushed to a powder, when, by magnets, the properties contained in it are separated.

The dust contains two substances, called magnetite and specular hematite—the ore containing a third of the former and two-thirds of the latter. Separated, the iron is made into "briquettes," and is ready for the foundry.

The first working experiment is to be made by a company which has just been formed for the purpose of working the ore in Norway; and recently at Balham a practical test of the value of the new invention was made for the benefit of a large number of journalists and gentlemen interested in science.

The momentous value of this latest Edison invention, and its importance to this country is not fully recognized on first thought. The company which has been formed for the purpose of making money out of it is of but passing interest.

AN IMPORTANT DISCOVERY.

The discovery itself concerns the greatest—the mainstay—industry of England. Many millions of tons of iron are required for industrial purposes in England every year. Over five million tons are imported for this purpose, and of this four-fifths comes from the Bilbao district in Spain. This source of supply is getting poorer and poorer every year, and in the opinion of experts it would be only a question of time before this source would be entirely closed to us. Such a stoppage would of course be a serious matter to the iron and steel industries in the kingdom. It is before such a difficulty has had to be faced that Mr. Edison has come forward and practically assured to the world an unlimited supply of iron.

It was told to the journalists recently that the Prince of Wales was very interested in the invention. Another important announcement was that Thomas Alva Edison himself intends to visit England next summer.

ACCIDENTS WITH ELECTRIC WIRES.

The Calcutta Police have issued the following instructions in case of accident, with electric wires:

The thick trolley wires over the tramway lines and the electric light wires are the dangerous wires. The other wires in the street are harmless so long as they do not touch the above wires; but if they be broken and fallen and touch the above wires they then also become dangerous.

If a wire falls harmlessly leave it alone, but prevent any one from touching it. If the end hangs loose, or the wire is an obstruction, it may be pulled on one side by means of a stick or piece of rope, and may be tied by means of string or rope, out of the way but it must on no account be touched with the bare hands. If it be necessary to use the hands they must be covered with a very thick dry cloth.

In moving a wire great care must be taken that it does not touch any other wire. Never stand on a fallen wire.

The constable must not leave his post until the wire have been made safe.

If a wire falls on a person and winds round him or becomes entangled in the clothing, the wire should be pulled away with a stick or by wrapping the hands in a thick dry cloth.

Great care must be taken that the wire does not touch the bare skin of the person or that of the rescuer.

A person injured by a fallen or broken electric wire, may receive an electric shock, may be burnt, may be cut by the wire, or may be knocked down.

If any wire be touching the injured person it must first of all be removed as above directed.

If the person is severely cut by the wire or burnt or otherwise seriously injured but remains conscious he may be removed to the hospital.

If apparently dead the person should be laid flat on his back with the head low and "Artificial respiration" should be immediately resorted to and should be kept up until medical assistance arrives.

The limbs may also be rubbed and cold water may be applied to the head, but no stimulants of any kind should be administered.

General.

FURLOUGH IN INDIA.

An important Despatch has reached the Government of India from Home, relating to the furlough rules, in which the Secretary of State sanctions the proposal that furlough in India may be allowed to count as service for pension to the extent of one year in 15 year's service, and two years in 30 year's service. This will apply to both European and Indian Services, and be forthwith put in force.

NEW ORDER IN COUNCIL.

An order in Council has been sanctioned by his Majesty conferring additional powers on the Governor General of India. The new order recites that it will operate in the territories of India outside British India, and any other territories which may be declared by his Majesty in Council to be territories in which jurisdiction is exercised by or on behalf of his Majesty through the Governor-General of India in Council or some authority subordinate to him including the territorial waters of any such territories. It is ordained that the Governor-General in Council may make such rules and order, as may seem expedient for carrying this order into effect, and in particular,—

(a) For determining the law and procedure to be observed, whether by applying with or without modifications all or any of the provisions of any enactment in force elsewhere, or otherwise.

(b) For determining the persons who are to exercise jurisdiction, either generally or in particular classes of cases, and the powers to be exercised by them.

(c) For determining the Courts, authorities, judges and magistrates by whom, and for regulating the manner in which, any jurisdiction auxiliary or incidental to or consequential on the jurisdiction exercised under this Order is to be exercised in British India.

(d) For regulating the amount, collection and application, for fees.

All appointments, delegations, certificates, requisitions, rules, notifications, processes, orders, and directions made or issued under or in pursuance of any enactment of the Indian Legislature regulating the exercise of foreign jurisdiction are confirmed by the new Order.

WOMEN AND SWIMMING

The acquirement of the art of swimming has increased amazingly amongst Women of late years, and it is a notable fact that not only can our Queen swim, but so also can all her daughters. The Princess of Wales, and

in fact, all the Royal Princesses are good swimmers, and love the art in a greater or less degree. Perhaps the greatest of all lady swimmers was the Empress of Austria, who at one time revelled in all manner of clever natatory tricks. All the Princesses of the Austrian reigning family can swim, as can also the Empress of Germany and the sisters of the Emperor. Although swimming amongst women is practically unknown in lazy Spain, the present Queen-Regent can do all manner of feats in the water, THE HUSTLE AND PUSH OF THE 19th CENTURY.

A well-known satirist thus speaks of the hustle and push of the nineteenth-century life:—"Man's business requires haste. The average business and professional man eats in hurry and gets dyspepsia. He walks in a hurry and gets apoplexy. He talks in a hurry and gets the lie. He does business in a hurry and becomes a bankrupt. He reads in a hurry and is superficial. He votes in a hurry and produces corruption. He marries in a hurry and gets a divorce. He trains his children in a hurry and develops spendthrifts and criminals. He gets religion in a hurry and forgets it in a great hurry. He makes his will in a hurry and leaves a legal contest. He dies in a hurry and goes to the devil. And his tribe steadily increases!"

BRIDAL SUPERSTITIONS OF DIFFERENT COUNTRIES.

Many and curious are the customs regarding brides. In Switzerland the bride on her wedding day will permit no one, not even her parents to kiss her upon the lips.

"Tis the lips of a bride on her wedding day
That belong to her husband for better or nay,
But if bad luck has it, she's given a kiss,
The devil may change her from Mrs. to Miss!"

In parts of rural England the cook pours hot water over the threshold after the bridal couple have gone in order to keep it warm for another bride.

The pretty custom of throwing the slipper originated in France. An old woman seeing the carriage of her young king—Louis XIII.—passing on the way from church where he had just been married, took off her shoe and flinging it at his coach, cried out: "Tis all I have your Majesty, but may the blessings of God go with it." There is an old superstition in Germany against marriages in May.

A favourite wedding day in Scotland is December 31st, so that the young couple can leave their old life with the old year and begin their married life with the new one. The Italians permit no wedding gifts that are sharp or pointed. Connected with which practice is our

superstition that the gift of a knife severs friendships. One beautiful marriage custom is that of the bride immediately after the ceremony, flinging her bouquet among her maiden friends. She who catches it is destined to be the next bride.

PETTICOAT GOVERNMENT IN AUSTRALIA.

The following curious results, yielded by the new electoral rolls of South Australia, are gathered from an Australian contemporary. The number of men on the rolls has shrunk, in a little over three years, from 83,640 to 76,767. On the other hand, women voters have increased during the same period from 68,375 to 71,682. In the three chief metropolitan districts the men voters have dwindled in number from 36,587 to 30,484, a reduction of nearly 16 per cent. women voters in the same districts have slightly increased their numbers, and now count no less than 32,801. The women voters in the chief city constituencies, thus actually outnumber the men; and if—under any caprice, or wave of feeling—they voted as a sex they would beat their husbands completely.

SUPERHUMAN STRENGTH.

If we are to credit the report of the *Medini Bandhab* it is the superhuman strength of a samson which Raja Raghunath Narayana Malla Ugal Shanda Deb Bahadur of Jhargram is said to possess. On the night of the 20th June last the Raja is alleged to have given a note worthy and almost incredible proof of his power. We are assured that a square log of timber 18 cubits long and 4 cubits in circumference was brought out on which was placed another log, a little shorter. These two logs were by the joint efforts of a large body of men placed on a pedestal. Then five stout men took their seats on the logs and this completed the preparations for the test of the Raja's gigantic strength. The Raja then put himself under the timber with its human load and succeeded with his back in lifting the whole off the pedestal, not once but several times. It is not easy to believe in the possession of so much herculean strength by a man of the present degenerate days but the correspondent assures us that he saw the whole affair with his own eyes and can therefore vouch for what he says. Truly is Jhargram called Mailabhum!—(*Anurta Bazar Patrika*).

THE POET LAUREATE'S POEM.

"THE THREE ANGELS."

The following poem by Mr. Alfred Austin, the Poet Laureate, has been specially written for an illustrated edition of the Official Programme of the Royal Processions issued from the office of *Black and White*, and the proceeds of the sale of which will be devoted to King Edward's Hospital Fund for London:—

THE ANGEL OF SORROW.

There are three Angels, deputies of God,
As ministers to Man; Angels well named
Of Sorrow, Pity, Healing. When proud Power,
Oblivious of the source from which it springs,
With far-resounding music fills the ways
Of opulent cities, bidding nations gaze
With envy on its wealth and industry,
Then suddenly athwart its vaunting falls
The shade of Sorrow; flitting-winged disease,
Anguish, and dread, recurring funeral bell,
Reminding splendour of mortality,
And lowliness of equitable Death,
The heritage of all.

THE ANGEL OF PITY.

Then thither hies
The Angel, Pity, lifts the sufferer
To smooth, white pallet, tends the aching frame,
Lays balm upon the smart, and to the heart
Breathes the old words of comfort and of prayer;
Puts tender questions, harkens the reply,
And ponders on the pallid, patient face,
Uplooking, helpless, dumb-beseeching gaze,
Till help's prompt voice be heard.

THE ANGEL OF HEALING.

Then, thoughtful-browed,
The Angel, Healing, enters; stoops to learn
Where lurks the poison, wrestles with the ill
With delicate strong hand and unnerved mind,
And, if Heaven wills, nor for some wiser end
Still bidden from the wisest of us all,
Forbids that Life shall temporise with Death
Beyond its hour, brings the sufferer back
From the half-traversed journey, bids him wend
Homeward once more, and on the darkening hearth
Beam with recovered hope.

But all must aid

Pity and Healing, as alike none should
Shrink from the Angel, Sorrow, for to bear,
Compassionate and freely, succour, is
The triple Crown of Subjects and of Kings.

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It may be stated that a page of the Review takes in about 730 words.

All contributions, books for Review should be addressed to Mr. G. A. Natesan, Editor, The Indian Review, Esplanade, Madras.

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IT is particularly requested that any change in the address of the subscribers may be early intimated. Complaints of non-receipt of particular issues of the Review received after the month to which they relate will not be attended to, and such, as well as old numbers of the Review will be charged for at eight annas a copy.

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The Delhi Coronation Durbar.



Lord Curzon has been credited with a lively imagination. This gives him a sympathetic insight into the tastes and tendencies of alien peoples and enables him to flatter them by small but significant expressions and deeds. He can lend an air of interest to well worn platitudes and invest with seeming reality the empty courtesies of official diction. The popular idea of the Viceroy is, or till recently was, that of a rare statesman who can appreciate the subtle as well as the tangible, the remote as well as the immediate, whose zeal cannot be killed by daily routine, and whose lofty ideal will survive the strain of political controversy. Four years have sufficed to show, however, that this quality of imagination (the word is a favourite one with Lord Curzon), is not of the very essence of his nature, but rather a superficial adornment. It does not regulate his ideals or his policy so much as it inspires his tongue or embellishes his arguments. Under its influence Lord Curzon has learned to suit his oratory to the tastes of Indians, but has made no genuine study of their wants or feelings. His is the imagination, if it may be so called, of the genial host full of smiles and curtsies, providing the comforts of his guests and ministering to their various tastes, rather than that of the philanthropist who cannot bear the sight of human suffering and will not spare himself while he can do something to alleviate it.

That it has more to do with words than with realities, is proved by a statement contained in his vindication of the forthcoming Delhi Durbar. "The King must be the representative as well as the figure head of his people." In what sense may the present Emperor of India be called the representative of the Indian people? Does he represent their religion, their nationality, their civilisation? Does he represent their modes of thought, their feelings, or their ambitions? Does he even know of these? Taking even the Viceroy, how far can he set up to be a representative of the people that he rules? Have they any voice in his council? Can they act or speak through him in any matter not purely ceremonial? It is a mockery to use such a word in describing an individual who does not even make a decent pretence of consulting their feelings or protecting their interests as understood by them in affairs of grave import.

Take again the example of Europe that Lord Curzon trotted out for our edification. The occasional meetings of rulers and the exchange of toasts at official banquets, we are asked to believe, have developed a sense of common interest and a desire

to maintain peace which were unknown in former times. Now we have no personal knowledge of these banquets, of the grand personages that take part therein or of the sweet professions and enduring promises they make to each other; but we fancy that more than childish credulity would be required to induce the belief that the so-called peace of Europe at the present time is at all a desirable condition of things or that, such as it is, it rests upon the mutual good will and fellowship of the various Powers. Words! words! words!

What real knowledge of each other can the Chiefs and Princes of India obtain by coming together at an immense function where their movements cannot but be restricted by the conventions of court etiquette and watched by the jealous eyes of European Residents? There can be no spontaneous flow of confidences between them, no time for comparison of notes, no opportunity for a full inquiry or a detailed observation of one another's work. With empty purses, palled senses, and weakened constitutions, most of these would return home perhaps sadder, but certainly not wiser men.

The Viceroy seeks justification for his ill-timed and extravagant display in the past history of India where coronations and installations have been always attended with gorgeous festivities. When one comes to examine the case, however, it is amazing to find how little is common to the Durbar that he proposes to hold on the 1st of January and to the celebrations that he cites as precedents. In the first place there has been no Coronation of the Emperor in India, nor will there be one on the 1st of January. In the second place, even if a mere rejoicing is intended, it should have been on the day when all the rest of the Empire rejoiced. Why were we kept out of the rejoicings then? Is it to remind us that our connection with the Empire is not like the connection of any other part with it? And does this difference require not merely a separate mode, but a separate day altogether? Again, if it is the desire of the Viceroy in the 20th century to emulate the pomp, pride and circumstance of an Eastern Coronation, should it not likewise be his desire to emulate the munificent charities the beneficent measures, and the large acts of royal clemency that were invariably associated with such an occasion? Unfortunately, amid all the elaborate preparations that have been going on for months, we never hear of the remission of a tax, the concession of a new privilege, the opening out of a new line of preferment, the creation of any charitable or educational foundation, or even the promise of any such boon to the people at large. Something of the kind is necessary

to show that the Viceroy had anything real in his mind when he spoke of the community of interest between the Ruler and his subjects and referred to him as their representative. It may be said that the Viceroy has no power to do it; then he should have scorned the empty pageant and the senseless display.

Another sentiment of the Viceroy uttered with the object of allaying discontent is illustrative of the levity with which the finances of this country are managed. Even if famine broke out during the progress of the Durbar, he was kind enough to assure us, money would be unstintingly devoted to the relief of the sufferers. This means of course that the Durbar would not be given up: the country, needing every pie of her own and begging for help from abroad, must spend Rs. 26½ lakhs to mark her supposed joy at an event that took place in another land a long while ago.

Rs. 26½ lakhs is the amount mentioned by Lord Curzon, but we are no believers in official estimates, and should not wonder if the actual figures were higher by 100 per cent. Nor can we believe what the Viceroy, carried away by admiration of his own economical arrangements, said about the recoveries by sale of the articles used for the occasion, 80 to 80 per cent. and in one case 100 per cent. was his estimate! We cannot resist the guess that the illustrious speaker was regarding his show as a supremely sacred ceremonial and that people would be glad to pay fancy prices for any mementoes connected with it.

The Arts Exhibition is no doubt a useful adjunct to such a display, and no one will grudge the Rs. 4 lakhs set apart for it. However, even in this matter it is necessary to point out that the impetus given to the arts and industries is only temporary and not a permanent measure devised to preserve them from the decay that seems to threaten them. If the Exhibition be used as a means of ascertaining the real condition of our arts with a view to their being developed in the future it will have served a good purpose indeed. But there is reason to fear that the exhibition is regarded as an end in itself and as a useful outlay of public money even if it led to nothing beyond. For the Viceroy seems to think that if public money be spent on such luxuries as tents, landaus, and saddlery, it is spent according to the principles of political economy. Surely six weeks' study of this subject out of any modern book is enough to teach a person that the rich man's folly is not ultimately the benefit of the public.

With regard to the pages, the Viceroy has thought it necessary to publish what amounts to a disavowal

of any intention to degrade the Princes who are to act in that capacity. Their presence is intended as an honour to the Indian Chiefs who are to receive decorations. To us, not initiated in the school of heraldry, it is not clear how the Indian Chiefs will feel honoured by pages being in attendance upon the Representative of the Sovereign and that of the Royal Family. If the Princes and scions of noble blood chosen for this office of page feel that it is an honour to them, there is nothing more to be said about it. Only the public would like an assurance that the honour is not to be forced on unwilling recipients but sought by the Princes of their own accord.

The Report of the Indian Universities Commission.

The Report of the Indian Universities Commission, which we discuss in part elsewhere, occupies over 94 pages foolscap. With a view however to place the main points of the Report within easy reach of our readers we have published as a supplement to this issue all the important extracts from the Report, relating to Teaching Universities, the Senate, the Syndicate, Graduates of the University, Affiliation Rules, Governing Body of a College, Teaching Staff of a College, Buildings, Furniture, etc., Discipline and Residence of Students, Courses of Study, Fees, Transfer of Students, College and School, Classical Languages of the East, Vernacular Languages of India, Matriculation and Government Service, Universities Funds, Legislation. We have also published in full the official summary of the recommendations and the full text of Justice Guru Das Bannerjee's minute of dissent. The supplement is available to subscribers of the Review at as. 4 and to non-subscribers at as. 8.

A HISTORY OF HINDU CHEMISTRY.

By DR. P. C. ROY,

Price Rs. 8-4.

Apply to—G. A. NATESAN & Co., Esplanade, Madras.

THE DECADENCE OF INDIAN ART.

AS I write there stand before me three little clay figures—the largest not more than 2 inches high. Each represents a native of India, clad after the fashion of his, or her, sex and rank. Each face has an individual character and tiny as they all are, each has a properly proportioned profile. That of the woman, who carries a shapely water jar is soft and sweet, one sees the fashion of her braided hair, and though of her three garments one is green, another blue and the third roseate, the colours are so modulated that they harmonize as perfectly as does a wild rose tree seen against a summer sky. The tallest figure is that of a grey-bearded fruit seller, one of whose garments is a pale yellow, while the other with his neatly folded turban is white. On the tray in his extended hands, are various fruits properly moulded and coloured. The third figure is that of a young man in a short blue tunic with touches of something scarlet beneath it, answering to his scarlet turban. Everything is done with such exquisite yet easy precision, that Indian friends can tell me the special race, avocation and even caste of each figure. I had a fourth, which I have given away. It happened to be of the same race and calling as the third figure I have described. Therefore the costume was the same, yet it was worn “with a difference:” the man depicted was ten years older and of another style of countenance. True Art, like nature, has “no two alike.”

I bought these figures in a shop near the docks of a North British seaport—one of those places where sailors dispose of the baubles they have gathered in their voyages. I paid but the veriest trifle for them, yet I am told by one who knows that it was about six times their value in their own land. As I look at them, I recall an incident reported from one of the earlier famine relief works. The writer said that a small, almost naked child—

I think that, man-like, he called it “a baby”—while sitting waiting for its food, amused itself by moulding some soft clay, into the presentment of native oxen, hump and all—and that the tiny artist, seeing he was observed, looked up and smiled, but shamefacedly, and not at all as if it thought it had done anything clever!

I recount all this because my little figures and my anecdote have impressed two considerations on my mind. First, how deep must be the artistic feeling in a country whose simple people, going to and fro about their homely duties are, in dress and gesture, all unconsciously, things of beauty and grace, fit to become, straightway, “objects of art.” Second, how much art skill must be inborn in the people of a country, when workers as humble as he must have been who made my figures, have eyes so true and touch so tender;—and when a child,—presumably of the same rank as those whom we meet in our British infirmaries and orphanages—knows both how to see and how to reproduce what it sees.

The Anglo-Saxon race, alas! is not as a race artistic. The great cathedrals of Britain are indeed noble works, but a little enquiry into their history shows us how much men, not of Anglo-Saxon race, had to do with their erection, while their inspiration came from a creed that the Anglo-Saxon has put aside. India can reply to Britain, even in this, by pointing to her own mighty temples and palaces. True, she does not rear such to-day even as Britain builds no new ecclesiastical edifices worthy of regard. All over the world and in all religions, that form of art seems to have been the outcome of a special afflatus whose force is not persistent. The great truth that “neither in this mountain, nor yet in Jerusalem, shall ye worship the Father” being really, despite its Hebraic vesture, of world-wide application, has come home to many who know little of him who uttered it. I have heard a Moslem declare, as he looked wistfully at the unfinished mosque below the Citadel of Cairo. “We have lost the art of mosque-building!”

The relics of the vanished handicrafts of old fashioned Britain are interesting and valuable chiefly because these were handicrafts, simple and honest in material, and really related to the lives of the people. But wherever beauty appears in them, some foreign influence may be suspected. This was the point where Britain profited from her antique hospitality to exiles of every race.

But India has always had an indigenous art which permeates her daily life, making even simplest household vessels into things of beauty, and clothing her people, especially her women, with a dignity and grace, not surpassed even by ancient Greece, and which can never be attained in countries where restless "fashion" rules, accepting beauty for one season only to replace it by ugliness next year.

Sir George Birdwood wrote long ago that the village communities have been the strongholds of the arts of India, adding that there can be no popular arts without popular traditions and that traditional art can only rise spontaneously among a people whose social and municipal institutions are based on a sufficiently wide recognition of their inherent and irresoluble rights to the soil. From its highest manifestation to its humblest, Art demands security, peace and leisure. The artist's bread must be sure, however simple and scanty, or his work will suffer. It will not suffer in simplicity and scantiness, only in insecurity. The Indian village, with its agricultural basis was the fit home of Indian art, and that art, safe, happy, and leisurely, sufficed to bring in such extra grist as the village mill might need. There was the perfect development of the "home industries," efforts to restore which are sometimes frantically made in Great Britain, but which now lacking there all the elements necessary to them, enjoy no more vitality than does the perishing blossom of a rootless plant stuck between paving stones.

Alas! it is fearlessly easy to destroy what is impossible to restore! To-day, new economic conditions are creeping over India. An alien legisla-

tion gives the native money-lender power to strip the village ryot and send him forth landless. Alien machinery fills the great cities and the homeless native whose handicraft cannot maintain him apart from his oxen and his paternal field, must needs go to drudge in the mills." His old customers are lost: the wealthier are buying European finery and bric a brac: the poorer are either unable to buy anything, or when they can scrape a few annas together, are driven to expend them on the cheapest machine made goods they can find. Mr. Havell of the School of Arts, Madras, declared that "among the wealthy and educated class of natives, the application of art, at least of indigenous, to ordinary surroundings and common objects of utility is generally considered old fashioned and out of date." "Native ideas of art" he said are as a rule limited to pictures and English furniture." How these ideas are exploited one can gather from Traveller's Tales of the Gilt Clocks and Ormolu Tables to be seen not in native palaces,—and I remember the guardian of a young Indian noble who got into debt in London, telling me that he found his unhappy ward in his lodgings, bathed in tears, seated on a sky blue satin sofa which was one of the articles which had tempted him to outrun the paternal remittance.

More than ten years ago, a Parsee lady speaking at a meeting convened in the interest of Indian arts and crafts, declared that she knew several families who had practised certain arts for generations, but who were giving them up in despair. Probably such cases could be multiplied by thousands since the recent famine years. As long ago as 1889, Mr. T. N. Mukharji in his book on "the art manufactures of India" wrote "the wonder is that cotton fabrics can still be manufactured with the old primitive loom all over the country." He adds—"in one sense, it is a misfortune that it should be so, for it shows the low value of human labour in India." One is inclined to demur to this. The weaver at his ancestral loom on his

ancestral plot of land surely held life on entirely different values from the wage-paid, barrack-housed hands in a big factory! In writing of things Indian, one feels some diffidence in differing from a native. Still in Britain, we have seen the same. As in India now, it was gradual, but to-day it is complete, and we know what a fine, independent and intellectual race has disappeared with our weavers in villages and country towns and that their place is ill-supplied by the hordes thronging the slums of Manchester and Birmingham. The former could be well-to-do on little, for all the best things of life, cleanliness, fresh air and decency, they had without payment, while the highest wages cannot buy these in a manufacturing town. The downfall of the handloom before machinery is slow, simply because the older method is long upheld by those who care for really good production, but under degenerating influences or absolute inability to buy aught but the cheapest, their number slowly but surely decreases to vanishing point. Mr. Mukharji himself frankly admits that "the European process of manufacture has not been able to give to the fabrics that strength for which native manufactures have a reputation. Nor has machinery yet been able to make those gossamer fabrics for which a wealthy Indian always paid a fabulous price."

Thus we see the verification of the Arabic proverb which tells us that people are apt to imitate the ways of their rulers! One of the great present-day dealers in Oriental wares says that it is inevitable that a "subject race" should be drawn on to minister to the influence of their rulers in matters of decorative art. Alas! that the present "masters of the world" in both hemispheres are not of artistic sensibilities! A pitiful instance of this was brought under my notice, when for the gratification of British philanthropists and "patriots" the dependent widows and daughters of massacred Armenians—women of a race whose marvellous embroideries have never been surpassed—after being driven through every degradation of tawdry

glitter and garish hue, were finally set to sew with their exquisite skill the rectangles and crude "red, white and blue" of the Union Jack for a "cushion cover"! So, in Egypt, the graceful water vessels which the stately daughters of the land used to carry on head or shoulder are giving way to square petroleum tins, their handle a bit of wood stuck across the open end. I have seen those wretched petroleum cans even in Greece, under the very shadow of the Parthenon. The lamentable results of an artistic country passing under the influence of in-artistic rulers are already manifest in those Indian art manufactures which India furnishes for British buyers, or for Indian buyers impressed by British taste. Aniline dyes, startling in their crudeness, supplant the old, soft, vegetable hues. A clever Anglo-Indian writer says that in a School of Art in one of the Native States, she has seen designs taken from clumsily moulded Parian ware and vessels copied from the roughest of English kitchen jugs of a quarter of a century back, artistic decoration being wasted on the surface of these ungainly forms. In many parts of India, British women have long been teaching native girls in schools and Zenanas to do hideous Berlin wool-work in glaring colours. Dolls dressed "like British ladies" are offered as tempting prizes. I have been repeatedly asked to send packets of New year cards or illustrated Christmas papers to zenana missions. I have always steadily refused. Others do not refuse.

Again, we find some of the dominant race—as for example a certain British Principal of a great Indian educational institution, who approach Indian art in a very unsympathetic spirit declaring that Indian artizans "are wholly illiterate" and that their technical skill, great as it often is, is the result of an hereditary instinct combined with long rule of thumb "practice." Other British educationists are wiser. Mr. Havell reminded the gentleman whose words we have quoted, that his assertion, however true, was far from derogatory to

Indian art. "All the antique industrial art now displayed in our European museums," said he "was worked by rule of thumb, and after Castellani had spent years in trying to rediscover an ancient Etruscan process of soldering minute grains of gold on to a gold surface, he at last found the secret preserved by "rule of thumb" in a family of goldsmiths living in the heart of the Apennines."

Mr. Val. Prinsep R. A. who is in great personal sympathy with India, has said "art work in England has always a tendency to reproduction: art work in India is manual, done by the hands of the workers themselves." Sir George Birdwood echoes this, saying "in India" everything is handwrought, and everything, down to the cheapest toy or earthen vessel, is therefore more or less a work of art." E. J. Poynter, R.A., is very emphatic that "we must not delude ourselves into the belief that we can produce works of art by the substitution of machinery for hand labour, or that the decoration of objects of common utility by a mechanical process can ever have an artistic value." He adds "we should indeed have made an immense step in advance if the public could be persuaded that it is better to have no decoration at all than such as is purely mechanical."

It has been well said that even the so-called "labour-saving" appliances extinguish the manual skill of the worker and the tradition of the workshop. They destroy the difficulties which train the craftsman's hand and develop his mind. The modern "Technical School" or "School of Art" are but endeavours to restore the lost skill and tradition. They were never needed by any artistic nation which had not sold its birth-right. An Italian artist, Giovanni Segantini, recently dead, and whose development artistic and moral deserves the attention of Indian artists, put this plainly when he wrote of "the uselessness of academic instruction for those born with a soul for art."

As an Italian, Segantini came of an artistic race, was born amid beautiful environment though

in extreme poverty, and spent the greater part of the first twenty five years of his life in Milan, a city possessing LEONARDO DA VINCI'S masterpiece "The Last Supper" and boasting the Brera gallery with great works by Raphael, Da Vinci, Luini, Titian and others. In their choice of subjects, these painters, products of an intensely ecclesiastical age were almost as limited as have been the delineators of Hindoo mythology. By their works, they seem to have been well nigh blind to the exquisite loveliness which nature has lavished on Italian landscape. Their marvellous powers were mainly devoted to illustrate the dogmas or traditions of Roman Catholicism, to Royal or ecclesiastical portraiture, but above all to infinite varieties almost always (conventional) of the eternally beautiful idea of the Madonna and child. These pictures were all that the young Segantini saw, and he doubtless studied them long and deeply. But the best lesson they had for him was the development of his consciousness that whatever gift of art had been given him was not to be used in abject submission to any dead hand however mighty, but in earnest endeavour to set forth what seemed true and beautiful to his own soul. The influence that those great masters must have had on his mind was so perfectly absorbed by it, that it cannot be traced in his productions, even as it has been well said that the only way to truly "classic" is to work in the spirit of one's own time, as the Greeks did in theirs. It remains a singular fact that Segantini re-discovered for himself certain secrets of method which had been perceived by all great painters of all times and countries. "It came to me" he wrote "through my loving and earnest study of nature, and as something personal and individual." He never painted a Madonna, but much of his work is sweet with the suggestion of maternal love, not only in human beings but also in those whom he called "the kindly animals who provide men with bed and meat and skins, working with man and for man." The Nature which the earlier masters had overlooked so

dominated him that he will be best known as "the painter of the Alps." He never went into society: a few faithful friends sufficed him: he never courted fortune: quite content to maintain a home to shelter his dear ones. His genius and his life alike had but one inspiration—it is one with which every creed and every race can sympathise, and is best expressed in his own words:—

"The enjoyment of life consists in knowing how to love: at the bottom of every good work there is love."

In Segantini's opinion Art Schools, (apart from the mere teaching of drawing which he valued highly and thought might be improved) had "no result but that of doing harm to true art and to humanity by producing mediocrities and miserable wretches." On the other hand, he had, says his biographer "Villari," a very high opinion of the value and importance of decorative art and of artistic industries... There can be no great School of Art unless artistic tastes are developed in every walk of life and this can only be obtained by fostering taste for artistic decoration in the home."

We may bring the truth of the last statement to the surface by asking each reader to answer for himself the following simple questions:—

"If beauty be banished from life, what are artists to depict?"

"If people do not care for beautiful forms about their daily life, are they likely to care for them in the (so-called) higher manifestations of Art?"

"If we are content to let machinery be the motive power of human effort, why shall we not be content with oleographs or lithographs of mills, iron-clads and steam-engines?"

(Probably there is already a breed of human beings who, to our last question, would reply quite complacently, "why not?")

These few considerations are presented in the earnest hope that they may quicken educated Indian attention to the value of a heritage already endangered, and only to be saved by the determination of every Indian to do all that he can to retain national characteristics and aptitudes, and

to pause and question every alien influence until it has proved that it comes not to destroy, but to fulfil and complete. This duty waits at every Indian's door, and must not be relegated only to the wealthy and powerful, or to sympathetic strangers forming societies for the preservation of Indian art. These have their place and purpose. But more than these is wanted. As one of the authorities already quoted has said,

"If real Indian art is to be preserved, it must be through a re-awakening of an artistic sense in the every-day life of the people of the country, not through the patronage of globe-trotters and curiosity mongers. No art ever flourished which was not rooted in the national life of a people."

If only India will be wise in time and cherish what, if once altogether lost, can never be restored, she need not fear that she puts back the clock of any desirable progress, rather she will play the enviable part of standing between the Past and the Present, conserving all that was good in the one and accepting only what is worthy in the other.

Once the art craftsman vanishes, the great artist, whether he work in architecture, in colour, or in sculpture may linger behind for a little—but only while some remain who have been developed under the old influences. With the last of those, he too must go.

But as long as the art craftsman remains, we may always look for the fire of genius to touch the brow of one whose senses have been trained and disciplined by heredity and environment. Then humanity which lives not by bread alone nor by cheap cotton nor fast steamers (nor even by the Union Jack!) receives another Divine message.

ISABELLA FYVIE MAYO.

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HIGHER EDUCATION IN INDIA.

“WE have truly endeavoured to fling wide open the gates of the temple of knowledge, and to draw multitudes in . . . and I do not believe that you will ever have a Viceroy or a Lieutenant-Governor who will desire to close by one inch the open door, or to drive out a single being who has entered in.” These are noble words and they were uttered by His Excellency Lord Curzon early in 1901 during the course of a speech at Aligarh. We trust Lord Curzon will bear in mind his own utterances before he resolves to give effect to the recommendations of the Universities Commission. His Lordship will by this time be in a position to gauge the intensity of the feeling of alarm which many of the recommendations of that body have created in the public mind. He will also have seen from the nature of the criticisms that have hitherto been expressed that the public mind reads in the recommendations of the Commission a desire to narrow the sphere of education in India.

We do not wish to attribute undesirable motives to the Government, but we do think that the methods adopted by the Government of India to improve the educational system of the country have not contributed to increase the confidence of the public. It is a method quite in contrast with that adopted by Lord Ripon when he appointed his Education Commission in 1882. The holding of the Simla Educational Conference *in camera*, the utter exclusion of even a single representative of the Indian public from the deliberations of that body, the constitution of the Universities Commission, the tardiness with which Mr. Justice Bannerjee was added to it after the unanimous protest of the native press, the locking up in secret of the correspondence that passed between the Viceroy and the Secretary of State and of the resolutions that were passed at the Simla Conference, the hasty and perfunctory manner in

which the Universities Commission took evidence, the inadequacy of the evidence collected—all these circumstances have tended to rouse a feeling of suspicion in the popular mind that the Government of India had previously determined what to do and that it simply appointed a Commission to bring in a report to support its made-up conclusions. It is also a singular coincidence that the Universities Commission in drawing up their report should not have taken into reconsideration the nature of the evidence tendered before them.

The Commissioners observe:—

‘It may be well to explain at the outset that we do not propose to enter at length into a discussion of all the schemes and suggestions brought before us. We have endeavoured to exercise an independent judgment on the mass of materials at our disposal and to select for examination those proposals which appear to be of an immediately practical nature.’

This circumstance has lent additional strength to the popular view of the question expressed above. We sincerely trust that Lord Curzon will prove by his action that the fears of the public have been ill-founded and that he has been judged in an uncharitable spirit. We ourselves venture to believe that unless His Excellency is inclined to withdraw his previous opinions, he cannot consistently give effect to many of the recommendations of the Commission. In his first address as Chancellor of the Calcutta University, on the 11th February 1899, Lord Curzon said :

I say to myself, therefore, in the first place, is it possible, and is it likely, that we have been, for years, teaching hundreds and thousands of young men,—even if the immediate object be the passing of an examination, and the winning of a degree—a literature which contains invaluable lessons for character, and for life and a science which is founded upon the reverent contemplation of Nature and her truths, without leaving a permanent impress upon the moral as well as the intellectual being of many who have passed through this course? I then proceed to ask the able officials by whom I am surrounded and whose trained assistance makes the labour of a Viceroy of India a relaxation rather than a toil, whether they have observed any reflection of this beneficent influence in the quality and character of the young men who enter into the ranks of what is now known as the Provincial Service. And when I hear from them almost without dissent that there has been marked upward trend in the honesty, in the integrity and capacity of the native officials in those departments of

Government, then I decline altogether to dissociate cause and effect; I say that knowledge has not been altogether shamed by her children.

A year later in his second Convocation Address the Viceroy confirmed the view he had taken the previous year. He said :

"I am surprised not at the egregiousness of the failures but at the quality and numbers of the successes. I am struck by the extent to which, within less than 50 years, the science and the learning of the Western world have entered into and penetrated the oriental mind, teaching it independence of judgment and liberty of thought and familiarising it with conceptions of politics and law and society to which it had for centuries been a complete stranger."

In the same address Lord Curzon declared,

I am one of those who think that as time passes by Secondary and Higher Education should become more and more a field for private effort, and should make a decreasing demand upon Government intervention and control.

And again :—

"Do not imagine for a moment that I am departing from that which has always been the mainspring of the educational policy of the Government of India ever since Sir Charles Wood's celebrated Despatch in 1854 viz., the substitution where possible of Government aid for Government management and the encouragement of private initiative and effort. I do not want to take back the pupil and shut him up in a Government nursery.

We have quoted at length some of the Viceroy's utterances on the Indian educational problem with a view to point out how inconsistent with his declared views are many of the objectionable recommendations of the Universities Commission.

With these observations we propose to discuss some of the important questions raised by the Commissioners in their report. The first point which occurs to us as deserving of the greatest attention is the concluding observations of the Commission.

"We shall perhaps be told that in attempting to indicate how the standard may be raised, we have framed proposals which may result in the withdrawal of some of the opportunities now offered to students in India. Under the system we advocate, the expense of college education will in many cases be increased, and it may be argued that the measures which we propose will have the incidental effect of narrowing the popular basis of the higher education. To this argument we reply that in all matters relating to the higher education efficiency must be the first and the paramount consideration. It is better for India that a comparatively small number

of young men should receive a sound liberal education than that a large number should be passed through an inadequate course of instruction, leading to a depreciated degree."

We venture to suggest that this observation of the Commissioners affords the real clue to many of their important recommendations. A perusal of these remarks raises up many larger questions. Is our present system of education really so bad that some drastic reforms are necessary to place it on a right basis? Has the higher education advanced and spread to such an extent that it is desirable to curtail the numbers receiving it even for the sake of that imaginary efficiency which is conceived to flow from the diminution in the number of those who seek higher education? The Commissioners seem to think that, making all allowance for the difficulties in the way, the graduate of Indian Universities "not infrequently lacks the general training which he requires to fit him for the business of life or for a further course of study."

We should be the last to maintain that the system of education as it is at present is perfect. We admit there are many directions in which improvements are urgently needed. At the same time we fear that the Commission has very much exaggerated the defects. Their opinion is very much in conflict with that of several administrators and educationists who have long lived in the country and have had abundant opportunities to form correct opinions. We shall first quote the testimony of Sir Antony Mac. Donnell. In his address as Chancellor of the Allahabad University, after quoting with approval the following remarks of the Education Commission "that throughout the country civil officers have begun to discover and ready to acknowledge that in integrity, capacity for work, intelligence and industry, the subordinate trained in college excels his fellows brought in accordance with the traditions of the past and that at the Bar the students of our colleges acquit themselves with distinguished success, and their influence has been generally of a healthy kind and that when command of capital

opens to them a commercial career, the general testimony is of the same purport as that borne to the credit with which they fill other positions in life." Sir Antony Mac Donnell adds with emphasis :

"That was the opinion of the Education Commission fifteen years ago ; in my judgment, and I speak from experience of administrative control in four out of the eight great provinces of the empire, *it is truer now than it was then*. This improvement of the moral standard in the public service and in professional and commercial life, manifests itself in many ways.

In his address to the graduates of the Madras University in April 1899, Mr. Spring, an officer of long experience in the country, said :—

"It must also be remembered that, if India is to be so governed that truth, happiness, peace and justice shall be established amongst all classes of the subjects of our Queen-Empress, it was and is essential that a large number of persons should be educated on the existing literary lines, in order that a sufficient number of reliable and intelligent men may be available for the professions and for the public services. So far as success in such a task is attainable in so short a period of a nation's history, the existing educational system has nobly attained to it, turning out large numbers of men with a far better mental and intellectual equipment than that of their forefathers, and at least able to avail themselves of the invaluable stores of ethics and of knowledge which are embodied in our Western literature. As the result, Government to-day finds comparatively little difficulty in obtaining a sufficiency of that intelligent and reliable subordinate establishment, without whose aid the carrying out of the best intentions for bettering the condition of the millions would be difficult or impracticable."

Sir Charles Turner, late Chief Justice of Madras, summed up the results of the higher education in these words :—

"Modern India has proved by examples that are known to, and honoured by, all in this assembly, that her sons can qualify themselves to hold their own with the best of European talent in the Council Chamber, on the Bench, at the Bar and in the mart."

Sir Bartle Frere, one of the former Governors of Bombay, said in 1867.

Wherever I go I find the best exponents of the policy of the English Government, and the most able co-adjutors in adjusting that policy to the peculiarities of the nations of India, among the ranks of those educated natives, for

increasing whose numbers and for raising whose standard of attainments this University is designed. It is not only here in Bombay but from every part of the Presidency I receive testimony to this fact. From Sind and from Canara, from Kattyawar and Guzerat, and from the furthest parts of the Deccan, I have the concurrent evidence that wherever progress, whether intellectual or material, is observable, there the natives who have received a good English education are among the most active in the good cause. And it is to be remarked that this is not observable of Government servants only.

In criticising the sweeping condemnation of our Indian graduates passed by the late Mr. Theodore Beck of Aligarh, the *Pioneer* observed :

The indictment is over-charged. With all their defects the Indian Universities have effected an immense amount of good, especially when we recollect that they are a creation of yesterday, and are only just beginning to reap the advantage of the transmission of qualities produced in generations by continuity of English teaching. It is not enough to concede that "we have reformed the Native judicial service and we have produced a number of clerks without whom the Government of the country could not be carried on so cheaply. Had he better opportunities for coming into contact with Bench and Bar in the Civil Courts, Mr. Beck would be the first to acknowledge that, in the standard both of probity and of legal attainments, the graduate munsif and pleader has, of course, with exceptions, positively revolutionised the administration of this department of justice. With monuments of learning from the pens of Native Judges and practitioners in all branches of the law, we must take exception to the proposition that the system has "notoriously failed to produce scholars" and we do not think that Mr. Beck would have to travel far out of Aligarh for the purpose of satisfying himself that his remark about "no pretence to turn out gentlemen" was, to express it gently, somewhat precipitate.

We have already quoted the testimony borne by Lord Curzon himself to the good results of higher education in India. In the face of these acknowledgments, it is difficult to join the Commissioners in their condemnation. Supposing for the sake of argument we accept the sweeping character of the Commissioners' remarks, we have grave reasons to doubt if the remedies proposed by the Commission will improve the situation.

But before we proceed to discuss their suggestions we shall answer the second question we raised above, —whether education has advanced to such a degree that even for the sake of efficiency it is desirable to limit its sphere? A reference to statistics will afford the most convincing reply. For our figures we rely on the latest official publication entitled "Statistical Abstract relating to British India"

Under the head of Education we find that for the last five years the number of graduates turned out by the Indian Universities is as follows :—

Calcutta	.. 1,830
Allahabad	.. 740
Punjab	.. 437
Madras	.. 2,401
Bombay	.. 815

Total for 5 years.. 6,223

Dividing this number by 5 we have every year on an average about 1,242 graduates. The total population of British India, according to the Census of 1891, as given in the very same blue-book, is 287,223,431. In the face of these figures would any reasonable man suggest for a moment that we have in India a superabundance of graduates? As Mr. Baines, the last Census Commissioner, observes :

“People who are unacquainted with the social distinctions prevailing in that country (India) and the nature of the barrier between them, and who estimate the condition of general education there by the calibre of the young men who pursue their studies at the Universities, or who complete their education in Europe, are bound to misjudge the situation, and to spread over the whole population the credit due to a very small class.”

Mr. Baines goes on to observe,

“Those who have before them the returns of the Indian Educational Departments are naturally struck with the large numbers displayed, as well as with the great increase in those numbers within the last quarter of a century or so, but do not take into consideration either the vast population from which they are collected, or the quality of the instruction so far as it appears from the tables.”

The truth is 94 per cent. of the population of India are unable to read and write, and of the 6 per cent. who are supposed to be educated, it is really lamentable to note that the number of highly educated Indians are very few, and when compared with India's vast population, this number is a mere drop in the ocean.

It is contended by the Universities Commission that its recommendations are intended to improve the standard of higher education. To this improve-

ment no sane man among us will object. But what we all find fault with is that the Commission has whether consciously or unconsciously sacrificed India's chances of enlightenment for the sake of a supposed efficiency of higher education. Bad as may be the higher education now imparted judged from the stand point of this superior efficiency, still in the peculiar illiterate condition of the people of India and having regard to the monumental mass of ignorance and superstition which often baffles administrators and gives cause for grave anxiety we assert from personal knowledge and experience that even the inefficiently educated man is notwithstanding what has been termed his depreciated degree, a centre of enlightenment whom the country can ill-afford to lose. In the struggle between enlightenment and education surely India stands in urgent need more of the former than of the latter. We need not say how the contraction of enlightenment which is sure to be caused by the carrying out of the policy of higher education recommended by the Universities Commission will prove a source of serious trouble and annoyance, not to say danger to Government. Lord Curzon has himself told us that there is no more dangerous enemy to orderly and progressive Government than the ignorance of the people. One may well ask, will any one who is interested in the welfare of this country do anything to limit the number? If the recommendations of the Commission are put into force they will undoubtedly prevent many young men from pursuing their studies. This is a great evil, we imagine. The Commissioners themselves see it though they comfort themselves with the appreciated degree which their reformed institution is expected to usher in for India.

The fact is, the Commission propounds certain views which we consider to be fundamentally untrue. For instance, the Commission seems to think that higher education is had in India rather at a cheap price. If the Commission had cared to consider the evidence placed before it, and had not

been so anxious to give us the benefit of its independent judgment, its conclusion would have been different. The evidence adduced before the Commission by Rai Bahadur Lala Baij Nath, Judge of Agra, is very telling, and we make no apology for quoting his remarks and observations in full.

"The object of our educational system is in my opinion to give every possible facility to all who possess the brains and the willingness to profit by it. In former times, as I have tried to point out, education was free. In modern times it is almost free in our indigenous schools even of the highest grade, and I beg most respectfully to submit for the consideration of the Commission the question whether we could not safely reduce the cost of it to the Indian parent. The fees charged in our Schools and Colleges, are in my opinion too high for the instruction given. The object is that those who can pay should alone profit by high education. But in India those who can pay do not possess the willingness to do so and the system keeps back those who possess it. The case of English Universities is no parallel. In an English University like Oxford a student has to pay as below :—

	£	s.	d.
College Fees	288	10	0
Private Tutors	100	0	0
Cost of Living &c.	300	0	0
	488	10	0
Scholarships at £ 125 a year ..	375	0	0
Cost to parent	£ 130	10	0
	Or Rs. 1702-8-2.		

On the other hand taking a College education in a Government Institution for the B. A. degree in the United Provinces the cost is as follows :—

	Rs.	A.	P.
Colleges Fees	360	0	0
Examination Fees	50	0	0
Cost of books	200	0	0
Cost of living in ordinary style in a Boarding House	800	0	0
Miscellaneous	100	0	0
	Rs. 1,410	0	0

1 Scholarship of Rs. 10 for F. A. ..	240	0	0
Do. of Rs. 12 for B.A. ..	288	0	0
	528	0	0
Cost to parent	about Rs. 1,000	0	6

Cost 25 or 30 years ago.

	Rs.	A.	P.
College Fees	96	0	0
Books	100	0	0
Fees of Examination	50	0	0
Cost of living	480	0	0
	726	0	0
For F.A. Scholarships Rs. @ 13 per mensem	312	0	0
For B.A. Scholarships @ Rs. 32 per mensem	768	0	0
	Rs. 1,080	0	0
Income to student	+ 354	0	0

Prospects of employment of :—

An English graduate in India about ..	300	0	0
An Indian graduate	Rs. 30 or 40	0	0
An Indian graduate 25 or 30 years ago	Rs. 75	0	0

Thus the difference is of about Rs. 700 ; but for this the English student gets advantage of University life nowhere met with in India. Education was not less thorough when smaller fees were charged nor is it less efficient in aided institutions where the rates of fees are about half of what they are in Government Institutions.

The testimony of two other retired Indian officials will show that Rai Bahadur Baij Nath has by no means been partial to his countrymen. In an address delivered before the Society of Arts on the 5th July 1882, Sir Roper Lethbridge made the following observations which require to be carefully noted at the present moment :—

"The enormously rich endowments of Oxford and Cambridge are known to us all. A modest £ 20 a year is all that is paid by an Oxford undergraduate for his tuition, and out of the 20 Colleges of Oxford the endowments of one alone (Magdalen) are probably equal to all the money spent by Government on all the Colleges of India. It may be said that much of these endowments came from private sources like the endowment of Mohommed Mohzan that supported the Hooghly College, and many other endowments in India that have lapsed or been resumed or forgotten. But Edward II. founded Oriel College and endowed it with crown lands and Henry VIII. founded Christ Church and endowed the Regius Professors. Henry IV. endowed University College and my own College; Exeter was endowed by Edward VI. Queen Elizabeth, and King Charles I., and there are a great number of other royal or public endowments both at

Oxford and at Cambridge. Or, again, it may be said that these endowments were settled in the old and ignorant times of our ancestors. Well, in 1855 certain Oxford professorships were founded by Act of Parliament, and endowed with the proceeds of certain stamp duties that were remitted. And during the past year what arrangements have been made for the New Royal University of Ireland? The present Government has agreed to endow it out of the Imperial revenues with an annual sum more than double that which is spent annually on all the State Colleges of either Bombay or Madras, and this is in addition to even larger sums paid out of Exchequer to other Irish collegiate institutions, so that Parliament gives every year to the colleges of Ireland, with its 5,000,000 inhabitants, about as much as is expended by the Government of India on all the colleges of India.

"The most important reason is this, that in India wealth is not so commonly, as it is in some other countries, a concomitant of literary profession or even of social consideration. The majority of families belonging to the literary and to the professional classes, and of social consideration are not even well-to-do. All these would be cut off altogether from high education by any increase of the fees which already press severely upon them."

Again, Mr. Lethbridge in his second address said:—

"It was the duty of Government to educate those whose destinies had been committed to their trust. And experience showed that those who had received superior Education were the most anxious to extend its benefits to others. Popular Education did not further high education so much as high education turned to the extension of popular education."

"It might be said that the rich men of India should bear the cost of high education. But rich men must first be educated themselves. Let the Government avoid unnecessary wars and senseless costly pageants, and let the fabulous salaries of high Indian officials be reduced to reasonable and moderate sums, and there would be no lack of funds for education."

Prof. Wordsworth's evidence before the Educational Commission of 1882 is equally telling.

Ans. 21.—Considerable confusion is, I believe created by a misleading use in this country of the term "Upper classes." The upper classes of this country do not exactly correspond with the upper classes of England. The Brahmins are an upper class, so far as they enjoy, for special reasons, the veneration of the people and the influence which arises from that veneration. But they have not the influence which springs from wealth. They are generally poor, and they undoubtedly possess

great intellectual aptitudes. In a country without educational endowments and without any aid extended by Government to higher education, they would to a great extent, be excluded from the benefits of education, and condemned to ignorance. For many reasons such a result would be disastrous; although there are persons, I am aware, who would contemplate such a result with equanimity, or rather with positive pleasure.

The classes which principally avail themselves of Government or aided schools and colleges for the education of their children, are the official, the mercantile, and professional classes. There are very few scholars who can be described as the sons of wealthy persons, or whose parents could afford to pay more than they do for the education of their children. I believe that many parents make great sacrifices for the education of their children.

Principal Wordsworth wrote thus in the Bombay Educational Report for 1878-79:—

"It is often said by ignorant and prejudiced persons that the state in India gives a nearly gratuitous education to pauper boys who are thus raised into positions of life for which they are wholly unfitted. The fact is that high education is much more nearly gratuitous in England than it is in India, owing to the liberality of royal and episcopal benefactors in ancient times; and the cost of such an education as our young men receive in Indian colleges is higher than the cost of a similar, though probably much superior education in France or Germany at the present time. I believe that an Indian parent who maintains a boy at college, and pays Rs. 120 annually in college-fees, makes a greater proportionate sacrifice than a parent in the same position in either of the two countries just named. The cost of maintenance is probably higher, but the actual fees for instruction are less. It would be easy to apply the test to Oxford and Cambridge expenses. I have called attention to these facts because an opinion appears to prevail that the education of the middle classes of India is assisted by the state to a degree which is unknown in other countries."

We may also remind our readers that not long ago Professor Selby who is now the Acting Director of Public Instruction in Bombay pointed in the course of an elaborate article in *East and West* that education in India was not so cheap as is imagined by many. Says Professor Selby:—

It is a very general belief that high education which by the way is talked of as a commodity having the same value everywhere, costs ridiculously little in this country as compared with what it costs in England—that

the explanation of this is that it is paid for in this country by the State, whereas in England, the parent has to pay for it—and that, consequently, the State here contributes too much to the expense of higher education. Its contribution, it is thought, ought to be diminished, if not altogether withdrawn: higher education BEING ANYTHING ELSE, a commodity which those who want it should pay for themselves.

Professor Selby then points out how little foundation in fact there is for these ideas, and he argues very ably that if the aim of education in India is properly understood, the provision made for it is very inadequate. Professor Selby observes:

“It is an entire delusion to suppose that the English parent pays for the education which his son receives at the University. It is obvious that he merely supplements the endowments of pious founders, as the Hindu parent supplements the contribution of the State. There cannot be any system of higher education which supports itself. It must be endowed either by individuals, or by the State, or by both together.”

Had the Universities Commission gone into the question deeply and not manifested such an anxious desire to present their report soon, the result would have been more satisfactory. It is with great reluctance we are obliged to observe that in almost every page of the Report there are very evident signs of hastiness and self-contradiction.

The remarks of the Commissioners in regard to poor students betray their utter ignorance of Indian conditions. They observe that the work of collegiate education has been much impeded by the attendance at colleges of students whose abilities do not qualify them for the University education. Low fees and free studentships, granted solely on account of poverty, have contributed to this result.

We take exception to these observations. In India learning has always been identified with the poor. The teachers and gurus were poor; the pupils were poor. Considerations of power and pelf never entered their minds. Learning for learning's sake was their motto and from time immemorial the poor student has proved deserving of all the kindness and patronage bestowed on him. Indeed it is the poor student that always turns the facilities afforded to him to the best advantage. Some of

the greatest men in the world have been poor. If indeed it was a foolish thing for a poor student to obtain higher education (as the Commissioners would seem to say) certainly it was foolish for a Scotch bricklayer's son, for an English cobbler's son and for the apprentice to an English book-binder to wish to have higher education. But as everybody knows had not these poor boys done such a “foolish” thing the world would have missed Thomas Carlyle, W. Carey D. D., and Faraday. In our own country some of the best men who have adorned the professions in which they were engaged and who have proved themselves the greatest benefactors to their countrymen have sprung from the middle class. Iswara Chunder Vidyasagar, Kisto Dass Pal, Keshab Chunder Sen, Harish Chunder Mukerjee, Dwark Nath Mitter, Krishna Mohan Banerjee, Madhoo Sudun Dutt, M. G. Ranade, Kasinath Trimbak Telang, Sir T. Muthusawmy Aiyar, Prof. Ranganadam, Sir A. Seshiah Sastriar and a host of other eminent men have sprung from the ranks of the poor, and it has never been suggested till now that they contributed to the deterioration of education. Mr. Carnegie's gift to the Scottish Universities has been praised all over the English-speaking world as bespeaking worthy philanthropy and far-sighted wisdom. Indeed even before Mr. Carnegie's gift, Scotland had the reputation of giving higher education on fairly cheap terms to the poor, and many have attributed all the peculiar excellence of Scottish character to this ready availability of higher education to all those who seek it there whether they be rich or poor. In India anybody who is acquainted to any extent with the inmates of the classes in the various colleges, will at once see that even now it is only the poor that seek the new higher education here, and it is only they who owing to the peculiar historic conditions of the country, display the fitness to imbibe that education, benefit by it, and thereby bestow advantage on others. We know that the conditions are different in the West. Generally the men of the poorer classes there are

less capable of deriving benefit from higher education. Western civilisation has not known to the same extent as Hindu civilisation has done,—the association of poverty with learning and the love for learning. If Mr. Carnegie deserves to be praised for cheapening the already cheap higher education of Scotland it is surpassingly hard to see how the Universities Commission is to be justified in its contention that in India the poor man obstructs the advancement of education and therefore ought not to be encouraged. Those among us who have received higher education in English are indeed the strongest support to the British Government and its ideals of justice and enlightenment. We do not believe that these men can ever prove a source of political danger in India. In coming years the Government will have to rely more and more on them as a matter of necessity, and if from a few among them the voice of discontent is occasionally heard, we cannot blind ourselves to the fact that the courage and capacity of British Statesmanship has not become so low as to make it necessary to cut at the root of all enlightenment and higher knowledge in India for the purpose of hushing such discontent into silence. Therefore it is our faith in the capacity and wisdom of British statecraft that has emboldened us to point out that in restricting the popular basis of higher education from the people of this land, the Government will be indulging in a very short-sighted policy of immediate safety at the risk of future progress and prosperity. It is not alone our feeling of patriotic interest in the progress of enlightenment in our land that has led us to send forth this protest against the policy recommended by the Universities Commission. In so doing we are actuated by feelings of great loyalty to the British Government itself in the continuance whereof we distinctly see the future salvation of India. It is impolitic therefore to discourage in any manner native enterprise in the field of higher education particularly at a time when the Indian graduate is

beginning to look beyond the horizon of Government service to employ himself usefully and with advantage to the community. It is impolitic again in the peculiar conditions of India to place obstacles in the way of the poor man seeking the benefits of higher education seeing that the really rich in India are so few in number and that they have not hitherto cared either to receive higher education or to place the benefits of such education when received at the disposal of the public or the Government.

For these same reasons we feel that the recommendations calculated to cause the disappearance of Second Grade Colleges are indeed very unwholesome in the effects they may produce. Each such college, however bad it may be in equipment, is seen to keep the mind active in distant places, making young men yearn for wisdom and look up to the leading and guidance of learned men. The dark nooks and corners that those colleges lighten can ill afford to lose the little lamp that they are now blessed with. Trim that lamp by all means, pour more oil into it, make the wick thicker if you like, but pray do not extinguish it. If all those that receive higher education in India are only just enough to feed the Government services and to fill the unoccupied portions of the learned professions if does not require much intelligence to see that the chances of enlightenment among the people will be very little indeed. To work out its extinction would be a most unaccountable breach of faith and reversal of policy on the part of our British rulers.

We have not entered into details bearing upon the proposed officialisation of our Universities and the compulsory enforcement of uniformity in higher education all over India both of which we conceive to be highly deleterious. The constructive recommendations of the Commission are very few and the Commission seems to have felt very sensitive in making even those recommendations for fear of making the maintenance of colleges more costly. The destructive policy that they propose largely tells only on native enterprise. To reverse the educational policy enunciated by Macaulay, continued by the despatch of 1854 and confirmed by the Education Commission of the days of Lord Ripon, we certainly require the opinion of a body of statesmen and educational experts very differently constituted from the Universities Commission appointed by Lord Curzon. Even such a body, if it had been appointed, would have found it utterly impossible to find adequate justification in the existing condition of education in India for the advocacy of such a retrograde and un-British policy.

THE POLICE COMMISSION.

I propose to discuss in these pages the following points raised by the Government of India in the Resolution appointing the Police Commission :—

(1) Whether the organisation, training, strength and pay of the different ranks of the District Police, both superior and subordinate, foot and mounted, whether on ordinary duty or in the reserve, are adequate to secure the preservation of the public peace and the proper investigation and detection of crime, and, if not, what changes are required in them, respectively, in the Madras Presidency with regard to its local conditions, in order to attain these objects.

(2) Whether the general supervision exercised by the Magistracy over the Police; and the control of the superior officers (including Inspectors) over the investigation of crime are adequate to prevent oppression on the part of the subordinate Police.

(3) Whether the career at present offered to natives in the Police in the Madras Presidency is sufficiently attractive to induce the proper stamp of men to enter it; and if not, what steps can be taken to remedy this evil consistently with the recognized measure of necessity for European control in the District charges.

The present Police organization in this Presidency has been in existence since 1860. The duties undertaken by the Police, as summarised by Dr. Maclean in his Manual of the Administration of the Madras Presidency, are—the preservation of the peace, the prevention of crimes and offences, the detection and apprehension of offenders, the discovery of stolen property, the collection of evidence against persons accused of grave crimes and the bringing them before the Magistracy and Courts, the apprehending and watching of vagrants and suspicious characters, the patrol of the country and public roads, the prevention of nuisances, laying information before the

Magistracy of offences of a public nature committed against any existing law, the inspection and verification of weights and measures, the management of public pounds, the service and execution of summonses and warrants and other lawful processes and orders issued by the Magistracy or Courts in any criminal matter, the safe custody of prisoners under trial or remanded by the Magistracy, escort and guarding of treasure and convicts, and maintaining a constant observation of every part of the country with a view to daily transmission and mutual communication of authentic intelligence on matters of public importance. Besides these ordinary duties, the Police undertake the guarding of jails, the prevention of smuggling on foreign frontiers, and the working of the Municipal Cantonment and contagious Diseases Acts. There is no separate detective branch. "Cognizable" crime is defined by the law, and is such as the Police may inquire into without reference by Magisterial authority. "Non-cognizable" crime can be investigated by the Police, only on receiving orders from the Magistracy. The former consists, as a rule, of grave offences against the person, property or the state; and are mostly the cases in which the Magistracy are instructed ordinarily to issue a warrant in the first instance for the apprehension of an offender. The latter consists of minor offences, and are such as the Magistracy are directed ordinarily to issue summonses for.

In every village, the person who is most feared—feared even more than the highest official in the district—is the Policeman with a ridiculously small pay. The reason is, that the law, as it stands at present, invests the Policeman with powers so very wide and comprehensive that it is no wonder that, when exercised by men whose salaries range from Rs. 6-8 to Rs. 8 per month, the result should be so very unsatisfactory. These men are drawn from the lowest ranks of society; they are actually paid little more than an ordinary cooly or sweeper; they are mostly ignorant and

illiterate; they are taken as constables, provided they come up to standard measurements, and provided they can read and write. The better classes stand aloof, as all the higher prizes of the service lie beyond the reach of native ambition, and the existing system of pay and promotion offers to them no sufficient inducements to enter the Police. The salaries of the Head Constables vary from Rs. 12 to Rs. 25 per month. They are, as a general rule, men promoted from the ranks of Constables for good work, and the Inspectors are promoted from the class of Head Constables. The District Magistrate, who is responsible for the peace of the District, is seldom consulted with regard to the appointments of Head Constables or Inspectors. Until lately an Inspectorship was the height of the ambition of an Indian entering the Police Department. The men selected for the higher grades are usually the relatives of Anglo-Indian officers in the Presidency, retired or still in service, or relatives of the friends of such officers. Naturally, therefore, all impartial persons are dissatisfied with this system, and a wide-spread impression prevails that this service is a kind of preserve for the exclusive benefit of persons who are popularly described as "sons of gentlemen" in the narrower sense of the term. To keep a large body of men in a thorough state of discipline and efficiency, to regulate judiciously the flow of promotion, to prevent harshness or favouritism on the part of the subordinate officers towards their men, to see that the maximum amount of work is got out of each member of the force, to protect all classes of the community including the lowest from any oppression that the Police may be tempted to commit, are one and all duties that call for considerable energy and force of character. And it is doubtful whether all these qualifications can be found in men who are appointed Superintendents or Assistant Superintendents of Police, without being required to satisfy any antecedent and well-prescribed intellectual or other similar test, or at any rate whether

it is the best system of recruitment that can be devised.

The law on the Police Administration is defective, the rules made in accordance therewith are faulty, and the working of the system is highly unsatisfactory. It is not at all uncommon to find Police officers grossly abusing their authority. We often meet with instances in which Police officers have fabricated evidence and got up false cases against poor innocent persons. The security of the people depends on the manner in which the Police discharge their functions, but instead of enhancing that security, it is the Police themselves who are the chief source of the present insecurity of person and property in some places. And the general supervision exercised by the Magistracy over the Police and the control of the superior officers are inadequate to prevent oppression on the part of the subordinate Police. The Superintendent of Police has generally the ear of the District Magistrate, and 75 per cent. of the Subordinate Magistrates whose prospects of promotion depend upon the good-will of the District Magistrate—lack the courage to criticize adversely the acts of the Police where the occasion calls for such criticism. Several grave crimes go altogether undetected.

In the Annual Administration Report for 1898, the Acting Inspector-General of Police, speaking of the administration of the Police in the Kistna and Bellary Districts, made the following remarks:—Para 36. "In Kistna, detection is as unsatisfactory under this head (dacoity) as under murder, and no explanation has been attempted by Mr. Hasted. The Kistna Police have for many years been most feeble in the matter of handling grave crime." "The state of affairs in Bellary is truly deplorable. The number of dacoities rose from 25 to 30, which is the highest on record during the last six years, while detection was absolutely nil."

Para 41. "The Ceded Districts show poor results as usual, Bellary being the worst this year. The

figures indicate the incompetency of the Police in the detection of cases as well as their prosecution before Courts." In reviewing this report, the Government of Madras observed :—Para 10. "Kistna was unfortunate in its Police Administration; only one out of eighteen murder cases was detected, and out of 183 persons tried for dacoity only 20 were convicted; detection in burglaries was also poor. The results in Bellary continued to deteriorate. Thirty dacoities are reported without a single detection and only one out of twenty three murders ended in conviction. In the detection of house-breakings and robberies also there is room for much improvement. Police work in this District has shown unsatisfactory results for some years past." I called the attention of the Government to this matter at a meeting of the Legislative Council held on the 14th November 1899, and, though the Government promised certain reforms, I am not aware of any perceptible improvement in the condition of things, at any rate in the Kistna District. Several crimes are not registered at all by the Police, and the existing arrangements regarding the registration of crime are capable of improvement. Further, the Police force is hardly adequate in several Districts even for ordinary requirements. The beat system is not working satisfactorily in the rural areas. The beat constable at present is not able to spend more than a few minutes at each village he visits and within this short time he is expected to bring information of the movements of bad characters and of the commission of crime to the Station House Officer!

If the evils of the present system be once admitted and recognized, the line of reform is clear and the remedy is obvious. A change of policy is needed. Government has seen fit to adopt a more generous policy in recent times in some of the departments of its general administration and the same spirit should animate it in the re-organization of the Police Department. Government ought to grudge no expenditure on the reform of this depart-

ment. Higher prospects and higher honours as well as higher pay and emoluments, should be held out as prizes of ambition to draw men who are animated by a high sentiment of loyalty, warm and single-minded devotion to duty to the national cause and to the Government they are privileged to serve, and with whom money is at best only a secondary consideration. Most of the posts in the Madras District Police carrying high salaries are held by Europeans. It is only recently that a few Indians have come to be appointed Assistant Superintendents, and one of them has been appointed District Superintendent. Up to the rank of Inspectors, there is nothing objectionable in the principle on which appointments are made, although there is great cause for dissatisfaction with regard to the salary and the qualifications of the men selected to fill these posts. But the principle is abandoned in the case of the higher appointments. Although, in theory, District Superintendents can be selected from among the Inspectors, in practice, they are, as a rule, selected from among outsiders. It is a matter of extreme regret that the orders of the Secretary of State and of the Government of India with regard to the entertainment of Indians in the highest posts in the Police Department have not been given effect to in the generous spirit in which they were issued. There was great dearth of educated men in early days, no doubt; but during the forty years that have elapsed since the organization of the Police Department, education has made such vast progress that the excuse of the paucity of educated Indians for the failure of Government to act up to its promise no longer exists. We believe that, if only judicious selections of well-educated Indians be made to fill up the posts of Assistant and District Superintendents, the capacity of Indians for satisfactorily discharging the duties of those posts will be recognised before long by all. The class of Assistant and District Superintendents should be recruited partly from the Inspectors in the Department and

partly from members of the Subordinate Executive service, such as Tahsildars and Deputy Magistrates, instead of from the ranks of unsuccessful candidates at the Civil Service examination or the relations of Anglo-Indian officials. Government will then have a wide field for selection. Government will thereby also have the advantage of appointing to responsible posts men of experience and tried merit and capacity, instead of the raw youths now appointed. And by that course, Government will also be able to redress the just grievance of the Inspectors that they have practically no prospects of a more ambitious career.

But in order that men possessing the necessary qualifications to become Assistant Superintendents and District Superintendents may be obtained from among the Inspectors, it is necessary to see that good men are attracted into the Police Department and that they are given facilities to work their way up to the grade of Inspectors. And as Inspectors generally come from the ranks of Head Constables, it is necessary to take steps to make the posts of Head Constables really attractive to men of ability. That means that the miserable salaries which these men are at present receiving should be raised. The designation of the office may be also changed to that of Sub-Inspector. There is a great deal in the name of the office in the eyes of the people of this country. If these reforms are effected, Government can easily insist upon better qualifications than are generally found now in a Head Constable, and thus raise the tone and strength of its Police Department almost from its foundation. It is also necessary for Government to raise the miserable salaries that are paid to Constables, if it really wants to have an efficient Police service. Until the pay of the Head Constables is improved, it would be advisable to bring in men from outside as Police Inspectors. It is nearly forty years since the present scale of pay of these officers was fixed, and prices of food-grains have nearly doubled during this period.

Again, another very desirable reform is the separation of the two branches of the Police Department—Protective and Detective. It is obvious that the qualifications required for those whose duty consists in the proper maintenance of law and order are not the same as those required in the case of officers whose duty it is to detect crime. The former class of men may in a great measure be likened to soldiers; they principally require courage, honesty, a tolerable degree of intelligence and a right sense of duty. The profession of the latter is like that of spies; only, they are a necessary and a valuable class of spies. It is necessary for them to play all sorts of parts, and consequently a more than average amount of tact, intelligence, presence of mind, love of perseverance, and even education and refinement should certainly be expected of them if they are to do their work properly. At present the same persons are required to discharge both the functions; and the result is that neither the one nor the other is well attended to.

GANJAM VENCATARATANAM.

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LIFE AND TIMES OF SANKARA.

(Continued from the last number, page 414.)

Then again, the extent of persecution, there is good reason to fear, has been in all cases most fearfully exaggerated. If we content ourselves with the Puranic accounts we have of persecution either of Buddhists in Hindustan and the Dakhan or of Jains in Southern India, we shall have to admit that millions upon millions of men have been tortured or burnt or destroyed in many other diabolical ways known only to pious persecutors. But taking a more sober view of India and its people and interpreting the Purans in the light of comparative study and calm criticism, we have ample reason to believe that religious or political fires have hardly ever clouded the serene skies of the village communities and parts far removed from towns and cities. And even in cities, the Buddhists, Jains and Hindus have, as a rule, pulled on well together for centuries and the account we have from Hiouen Thsang of the relations between the hostile sects does not forebode the coming storm

which we are asked to believe raged over Hindustan so fiercely under the guiding hand of Bhatta, in the next century. Testimony from unexpected quarters continues to pour in our own days to prove that wide, fierce and relentless persecution never could have been a fact in the History of India, but that those relatively few cases which undoubtedly *were*, were confined as a rule to particular localities, the great capital cities usually, and to the 'tallest blades of the field'—namely the parties to a disputation, and even they killed for other reasons than merely religious.

On the whole however Bhatta seems to have succeeded in converting many large provinces, and the tradition which says that the earliest Brahmin immigrants of the Canaras were Bhāttas confirms the fact of his having made a large following. And when he was satisfied that his work was fairly over he is said to have resolved on the extraordinary course of committing himself to flames, of which as has been hinted, news reached Sankara at Prayag or, as Chithvilasa has it, at Rūddha or Rudrapur, of which Bhadrā Sena was the ruler at that time. Sankara hastened to the spot and found Bhatta with piles of straw and dried sticks thrown about his person and already set fire to. He caused himself to be announced to Bhatta and asked for an explanation of this course. The latter answered that on reviewing his life he had found two unpardonable sins which he had been driven to commit to further his mission. The one was the killing of his Guru, Buddhist though he was, in the flame of persecution which he had kindled; and the other, the practical denial of God in his endeavours to prove the absolute revelation of the Vedas and the sole efficacy of the Vedic rites to save men. The smiritis having ordained self-immolation in such cases as the proper method of purifying oneself, he had resolved on setting the example of obedience himself, that the world might not have cause to say he was a parson that recked not his own rede. Sankara expressed a desire to have the pleasure of a discussion with him, but as Bhatta had already become half burnt he could not collect his thoughts. He therefore asked Sankara to go to Mandana Misra, a champion of the *Karmic* means almost as good as Bhatta himself and who had married his sister and at this time was living at Mahishmati, the capital at one time of Magadha. And after taking leave of all, Bhatta passed away leaving in the minds of people feelings of various kinds!

Tragic and full of instruction this narrative undoubtedly sounds, but for purposes of history it is to be feared that the part of the story relating to the meeting of Sankara and Bhatta is valueless,

for chronology does not favour it, if we have adopted the right time for Sankara. This touching story then must be regarded, like many other touching stories, that of Solon and Croesus for instance, as having other uses than historical. The remark, however, applies only to the *meeting* of the gurus. It was in all likelihood a fact that Bhatta ended himself in that extraordinary way, for his nature, so far as tradition discovers it, seems to have been highly impulsive; and being a person terribly in earnest, if he had been conscious of having sinned and that nothing short of that final step would meet the needs of the case, he was not the person to shrink from that step.

We now come to what apparently was the greatest achievement of the guru—the disputation he had with Mandana Misra and its results. The elaboration of this event in almost all our authorities is evidence of its great importance, but strangely enough we have not a couple of *facts* about it given in a plain and acceptable manner. Leaving Prayag, says Madhava, Sankara went to Mahishmati where Mandana was living as chief Pandit of the Court and in great affluence. A fine palatial house, a number of men-servants and women-servants, rows of parrots and other birds repeating the formula of their master, 'स्वतः प्रमाणं परतः प्रमाणम्' these are enough to show how he was living. Madhava's account places the incident of this disputation relatively at the beginning of Sankara's tour. Anandagiri, on the other hand makes Sankara go from Rudrapur, after the Bhatta affair, "northwards and reach Vidyalya lying South-East of Hastinapura and called at that time by the natives *Tijil Bindu*," for here lived Mandana.

Accordingly Sankara went to Mandana's house and met him. What occurred at the meeting is given by Madhava, but here his book is decidedly bad and detestable. The only inference from this rubbish seems to be that Mandana, brought up in the Karmic faith, had come to entertain a constitutional hatred for Sanyasis (who have to give up the daily rites) as a class of people unclean and unfit for association. For we are told that he was performing a Sraddha ceremony, when Sankara 'dropped down' in their midst from the skies. This 'dropping' we shall examine presently. At once Mandana was wroth and a detestable talk ensued between the two, of which the following sample must suffice. "Whence art thou shaven (cne)?" "From neck upwards." "I asked the way by which thou hast managed to come." "And what did the way answer thee?" "That thy mother is a widow." "Just so, *thy* mother is therefore a widow, eh?" And so on growing

from bad to worse, till the Brahmins who were present for dinner interposed and pacified both!

After this fine introduction however, we are told that Sankara desired Mandana to let him have the honor of wrangling with him. And he agreeing most readily, they sought for an umpire. Now it so happened that Mandana had a wife of the name of Bharati, whose learning and accomplishments had been vast and many sided and whom accordingly they agreed to honor by appointing her as Umpire. Each began with a stipulation that in case he were defeated, he would take on himself the rule of life of his opponent. In other words, Sankara if defeated, agreed to marry and become a house holder—the worst sin a Sanyasin could commit. And Mandana, in a similar case, agreed to become a Sanyasin and receive the red-robe from the hands of his own wife. And the wrangling continued day after day, the hours of daily routine alone excepted.

Bharati, according to Madhava, did not sit and listen, but was minding her household duties. At the outset she had thrown two garlands over the shoulders of the disputants with a prophecy that he whose garland should begin to fade first, should consider himself defeated. After several days, Mandana's began to fade. Accordingly he owned defeat, though in a sullen mood, while his wife, now that her husband was dead to her, prepared to leave home, though we are not told whither to go. For at this stage a miracle comes in. In all our authorities, this lady is treated as an avatar of the goddess of learning come into the world by way of punishment for a piece of silliness in her heavenly abode. She laughed at the mistake which the Sage Durvasas made while chanting the Vedas before the Creator and his wife and a large assembly. The sage was wroth at the female who had dared to expose him to ridicule and pronounced this curse upon her, and subsequently, after her prayers had softened his heart, limited the period of her exile! The morality of the story is equally remarkable with the justice of the punishment!!! Accordingly her period of banishment now over, she began to go back to her heavenly husband. One of her missions had been to proclaim the omniscience of Sankara, which she had done by means of her umpireship and so she was free to depart. But Sankara stopped her flight by Mantras and begged the honor of 'trying conclusions' also with her and the favour of departing when he should agree to it, both which were granted. He now turned to Mandana still brooding over his defeat, and begged him to reconcile himself to the inevitable, seeing that Jaimini himself, the reputed author of the

Karma Sutra, would have agreed to his interpretation of these Sutra. So Mandana cheerfully acquiesced in his defeat and offered to become a Sanyasin and follow him. But, it is added, Bharati now interposed (note contradiction with what has been said a few lines supra,) and begged a disputation, for Sankara had as yet defeated but one half of Mandana, herself being the other (and better?) half! He objected to arguing with women (!) but she quoted the precedents of Gargi and the rest. So, as before, the wrangling went on for seventeen days. Bharati trying to discomfit him passed from one Shastra to another and, finding that she could not do it in any other science, resolved to humble him by means of the science of Love! Now Sankara had not had the sexual experience needed to answer questions on this practical science and so found himself on the horns of a dilemma and his omniscience was at stake. So he begged of her an interval of one month, which being allowed, he went along the banks of the Narmada and in the hole of a tree in some forest there, hid his body and asked some of his disciples to keep watch over it. Then he caused himself by means of his *yogic* powers to be separated from that body and beating about to effect his object, luckily found the dead body of a King Amaruka, which was about to be committed to flames, and entered it. The King rose and all the town rejoiced.

But in a short while, the ministers as well as the Queens of the late King found something extraordinary about their King and suspected some Mahatma at bottom. So messengers were secretly sent to search for a human body hid somewhere in lonely forests or caves and burn it away that the Mahatma might remain with them for a long time. Meanwhile Sankara was having his fill of love with Amaruka's queens and recording his experiences in a treatise which has come down to us. And in the midst of these lovely women and their blandishments, he forgot his promise and the month agreed upon had passed away. So the disciples had begun to search for him and having learned the miracle about the resurrection of Amaruka, went to his city, sought audience with the King and sang songs of Advaitic turn, which at once bringing the guru back to his right senses, they all hastened to the place where the body had been hid. But by this time the messengers had found it out and having brought dried sticks to the mouth of the hole, had just set fire to it. The guru hastened and entered his own body and prayed Nrisimha (the tutelary deity of Vijayanagar and of Madhava) to help him, which he did, sending down a timely shower which put out the flames and Sankara got out unscathed.

After these adventures, Sankara returned to Mandana's abode and resuming the wrangling satisfied Bharati on all points and proved that he was omniscient and then according to Madhava she departed back to her heavenly home. But according to Chithvilasa and others, she was still held spell-bound in the air and was slowly brought along with Sankara to Sringeri, where he caused a temple to be built for her and dedicated to her. Here she was persuaded to take up her residence and remain manifest to her devotees till the end of time. And Mandana offered all his possessions as a gift to Sankara, who however asked him to divide them among the poor and deserving and then follow him, which he did. He also taught him his works, and when he showed himself worthy of it, admitted him into the orders with the name of Sureswara Acharya, a name by which he is known in these parts to this day.

This rather long and tedious account of Mandana's conversion had to be given that we might now examine it so as to find out what it was that exactly occurred, for there must have been some truth at the bottom of this grotesque account which we have summarised. At first sight it seems so full of absurdities, exaggerations, distortions and iniquities, that one is tempted at once to reject the whole as a tissue of groundless nonsense. But on a careful analysis, however, we find that two main points might be attended to and examined, which will lead us to restate the whole affair as it, in all probability, did occur. These are (1) the nature and fortunes of the great lady known as Bharati, and (2) the yogic adventures of Sankara.

With regard to Bharati, tradition is unanimous that she was really a gifted lady, well versed in the Shastras and a fitting companion to Pandit Mandana Misra. We need hardly concern ourselves with the discussion of her avatar theory, for that is evidently an invention of a later generation which could not understand the earlier right. But we should try to make out if the umpireship of Bharati as between her own husband and a stranger Sanyasin means anything. In the history of the world there is not perhaps one other instance of this strange arrangement—least of all in India, where the whole course of Aryan History has been against this kind of chivalry or gallantry, wives, however gifted, having always occupied the second place. So that equality is out of question and a position of superiority which umpireship implies cannot so much as be dreamt of, so inconceivable it is that Madhava tries to explain it away by the myth about garlands.

There is however a fatal objection to this story which is the strong probability, almost amounting to certainty, that this famous disputation never took place in Mandana's house at all. He was chief Pandit at some chief's court and judging from what we have had of Bhatta's proceedings, as well as from all other known cases, it is clear that learned disputations of this kind usually occurred in the assemblies of Kings and in their presence, that peripatetic Pandits might receive due rewards and honours. Later on, again, we learn that King Sudhanvan accompanied Sankara to Ujjain. Now, whether we regard him as the same that helped Bhatta and persecuted the Buddhists or some successor of his, it means that he had become a convert from Bhâtta to Sânkara faith, and, in the absence of any statement to the contrary, as the result of Mandana's defeat; for, it is inconceivable that he could have changed his faith without witnessing the disputation himself. Accordingly we shall not perhaps be far from the truth if we take it that the wrangling did take place in the King's assembly and that the umpireship of Bharati is a myth from beginning to end and a clumsy attempt to explain some half-remembered anecdote by a later generation.

Let us try to realise to ourselves the circumstances of the case. Bharati belonged to an age when learning among women of all classes had been more diffused, and they enjoyed greater freedom, than during the centuries following the establishment of the Mahomedan Empire. For it was one of the greatest revolutions of Buddhism to educate women and make them go forth as peripatetic preachers or Parivrajikas even to distant lands—the reader will easily recollect Sangamita who went to Ceylon. And this spirit of Buddhism, living as it did for centuries in close contact with Hinduism must have communicated itself to the latter. So that by the ninth century learning among Hindu women, especially of high social status, must have become fairly well diffused. Accordingly Bharati was only one, though one of exceptional abilities, of learned women. This fact seems to have escaped the notice of the inventors of the legend we are examining, probably because they were living in days when consequent on the terrors of Mahomedan aggression, the dark purdah had already fallen on the liberty and learning of women in Hindustan, and it had become so rare in the succeeding centuries that men went so far as to call this Lady an avatar of the goddess of Learning, taking advantage of her name. Accordingly after a careful examination of the distorted versions of Madhava and Chithvilasa, summarised above, the simple facts of the Mandana—

Sankara duel might be given thus:—The disputation between these two great men was held in the presence of the King. Mandana set out with the rash vow of becoming a Sanyasin in case of defeat—not a very violent supposition in the case of one who had come to regard himself well-nigh invincible and who had a fiery temper. And, with a person of his doctrines, turning out a Sanyasin and giving up the daily and periodical rites, was about the worst sin he could commit in the world. Bharati having learned his defeat and its results, took the only sensible course that a woman of her learning and character could take, and renounced the world and was content to accompany her husband wherever he went, like any Buddhist *parivrajika*. And when later on the Sringeri mutt was established and Mandana was placed at its head, she settled down there and passed her days in prayers and penances, such as befitted best a woman of her standing under these circumstances. She was perfectly justified in the course she had taken, for though with the donning of the red robe, Mandana became dead to her as husband, she was still safest under his shadow. Lastly, her noble and resigned life in her later days, and her quiet end at Sringeri, added to her uncommon learning and other accomplishments, formed the ground work of the legend, which in the hands of Clithvilasa and others has ended as it has, Sankara being made to bring her bound by Mantras through an aerial pathway and locate her in the temple built for her at Sringeri.

If we are prepared to admit that this version is the most probable one in regard to Bharati, then the yogic adventures of Sankara can be summarily dismissed and need not be discussed at all. Many another great man has had reason to exclaim, 'Save me from friends!', and it is therefore small wonder that Sankara has likewise had cause to do so. If miracles were least needed in any one case, that is the case of Sankara. There have been true heroes of God as well as false or sham heroes. If the latter had felt the need of miracles to puff them up, it might be set down as a common trick of the trade and treated with the contempt that it deserves. But that the greatest thinkers and the greatest moral teachers—Sankara and Buddha and the like—should have had such trash gathering round their names and that even the sensible portion of their following should have failed to rest satisfied with the greatest miracle about them—their lives of purity and self-sacrifice and their undying words or thoughts—is what makes one feel so much for human weakness. Whether these great men expressly denied their ability to work miracles, like Mahomed, or gave no indications to

any people infer their divinity, as Sankara himself has done, they have all fared equally ill and being set down as impostors, a host of stupid, inconsistent or unbecoming miracles have been suffered to gather about their blessed memories.

Accordingly, the whole story of the transference of Sankara's soul to Amruka's body and the iniquities connected with it has to be rejected with loathing and abhorrence, as creditable neither to the person who is sought to be magnified nor to the moral ideals of those who invented it. And the motive assigned for so much of questionable adventure is after all silly, inconsistent with itself and crooked; while the impudence of Bharati in this version of the affair, is simply amazing and atrocious, whether we regard her as human or divine. In rejecting this miracle, however, let it be at once stated that it is not thereby meant to condemn that particular Yogic art or any other art allied to it, as being in itself impossible—that will be going out of the way and perhaps presumptuous. With all the deference due to those who believe in such arts, however, and whatever each one's private opinions may be of their practicability or necessity or use, to accept Madhava's version of it in connection with Sankara, under the circumstances noted above, and for the object mentioned, is to say the least of it, to consecrate abomination and revere immorality. The works of the Teacher are miraculous enough to satisfy the most ardent expectations and no sensible admirer will be justified in exalting him to bad eminence in any case.

The result of Sankara's advent to Mahishmati was therefore not merely that Mandana was converted, but that the king and his court were likewise converted to his doctrines. For Sankara, while emphasising *gnana* or knowledge of the Supreme Spirit as the chief object of man's exertions, did not go the length of rejecting other means as Bhakta and many another controversialist had done before him. This spirit of compromise, of which we shall have more later on, in all likelihood made his work easier, here as elsewhere, for there was but little revolutionary about his contentions. The Bhaktas could go on with their Karman—only the spirit which underlay the doing of them became different. Having done this work at Mahishmati, he left with his disciples for the South and passed through Maharashtra, preaching his doctrines wherever he went and denouncing wicked practices and sending forth disciples, where he could not go himself, to spread the Vedanta. A class of Brahmins here worshipped Siva under the name of Mallari, under which the position of the dog, which was the animal that this God loved to ride on, became exalted, and vedic texts

such as शम्भुः श्रपतिभ्यश्च्योनमोनमः। quoted to support it! But Sankara could easily prove that they were hopelessly in the wrong and show that the dog, as an unclean animal, could never deserve worship! Mallari is even now the tutelary deity of many a Mahratta clan and at the festival of Dasara he is offered special worship, but his dog or dogs are not heard of in our days.

There were likewise Kapalikas here, and from one of them the Guru seems to have had a narrow escape. We have had occasion just to note their names and their existence at an earlier stage. Their favourite deity was Bhairava, the Destroyer, who had a peculiar fondness for the heads of learned Brahmins, the more learned and pious, the better! And a head presented to him streaming with warm blood was the most acceptable offering. A section of Mahratta Brahmins of the name of Karadis have had a bad reputation among people of South India for having decoyed in former times stray pilgrims from the South to Benares and after fattening them for a whole year offered them to Durga at the close of Dasara, as an acceptable and a highly valuable *bali*! This charge against them is nothing new and it was in all likelihood a Karadi Brahmin of these parts that approached Sankara at this time with intent to gain his head for an offering, hoping doubtless that his reward on this account should be great in heaven. There is nothing unique about such a belief, for history has known of the Carthaginians and their Baal-Moloch who had an extraordinary fondness for children, beautiful children and the only children of their parents!

Madhava says that the Kapalika approached Sankara and begged for his head employing sophistries of Advaitism to prove that Sankara did not lose anything, while he himself gained the highest object of his ambition. The Guru agreed and asked him to come and take it, while he was alone and was absorbed in contemplation, which accordingly he was about to do, and was just aiming the fatal blow, when Padmapada who was by, caught hold of his uplifted arm, knocked him down and killed him with his own weapon. Madhava in relating it takes advantage of this killing to introduce his favourite deity Narasimha and add that the spirit of this fierce god was upon Padmapada, which, Sankara (opening his eyes and finding what had taken place), managed to lay with praises sung of his old exploits.

Then he travelled South till he reached the sources of the Tungabhadra where he stopped and built a temple to be dedicated to the goddess of Learning who, under the name of Sarada is to this day the residing deity of the place. Chithvilasa says

that he was helped in this business by a local chief of the name of *Vera Sena*, and having completed the temple, he added a *mutt* to it to manage its affairs and placed the most learned of his disciples, Mandana, at its head, with the name of Sureswara Charya, by which he is still known in the records of the *mutt*. This is "the Sringeri Mutt" of to-day, the most richly endowed and the mostly widely followed of South Indian Religious Institutions.

Madhava here chooses to give some account of the daily life of the Guru, which is just what one finds in *mutts* even in our own days—with this exception that there was much original teaching and composition because of the presence of the Founder of a new School of Philosophy. In connection with the latter work we come upon an undesirable incident that there was jealousy among the disciples and even in matters which the Guru might call his own, he did not always find it possible to have his own way. At this time Sankara was desirous that his commentaries of the Vedanta Sutras should have a gloss added to them to prevent misconception or to supply ellipses. He seems to have felt convinced that Mandana's learning had fitted him best for the task and he therefore asked him to do it. At once his other disciples set up Padmapada, the earliest and undoubtedly the most devoted of his followers. They argued plausibly enough that Mandana's conversion was on account of his defeat and not the result of conviction; that his gloss might prove dangerous to Sankara's system, for he might unconsciously or deliberately lean towards the faith in which he had been brought up all along, and therefore Padmapada might be asked to do it, for his devotion to the Guru had been tested more than once and he had had all the works taught to him thrice by the guru himself. It might be that he was born a Prabhakara but he had been weaned from that faith even in youth and was therefore well worthy of the honor and trust implied in the permission to annotate his guru's works. Padmapada, however, suggested some other names, Anandagiri or Hastamalaka, who had joined Sankara in his tour through Maharashtra, in order that he might appear less selfish in the eyes of his Teacher. Sankara felt perplexed and vexed. He felt sure that Mandana was, by his intimate knowledge of the strong and weak points of the Karmic philosophy, best fitted; yet in this great undertaking, he did not want to go against the wishes of the majority among them. So he suffered Padmapada to do it though he had misgivings, and was really sorry that he had to lose the gloss of so valuable a hand as Mandana. To console the latter however, Sankara allowed him to annotate

his commentaries of the Upanishads and compose one or two original works. This unseemly quarrel shows the sort of disciple that had gathered round the great Teacher. It seems to be the curse from which few great Teachers could be said to have been free. The reader of the Bible will recollect the quarrel among the disciples of Christ for precedence.

Padmapada then annotated the commentaries of the Sūtras and in doing it had exposed the flaws of the Prābhakara philosophy to ridicule over and over. He seems to have been 'a vain man' for having done this work, he asked the Guru's permission to go to Rameswar—in reality perhaps to parade his learning in the land of his birth—which being given, he went among other places to Chidambaram, (his 'native place' according to Chithvilasa) at that time the strong-hold of the Prābhakara faith. It is just possible that the great and ancient temple of Chidambaram was originally connected with this form of Sun-worship and *Chith Sabha* and the *Rahasyam* (secret) are relics of the old faith modified of course to suit the needs of a later Saivism, of which it is now the chief centre in South India. Here Padmapada stayed with his uncle, who was still a Prābhakara. This person happening to read portions of his nephew's gloss, (which the latter's vanity could not hide from him) resolved to wreak his vengeance on the manuscripts for the on slaughts which the gloss had made on the faith dear to his heart. And Padmapada having in a moment of weakness agreed to leave his books behind him and set out for Rameswar, the uncle contrived to consign the books to flames and, on his nephew's return, expressed great sorrow for the mishap! Padmapada was at a loss to know how to proceed and was not sure he could do it again so well, because, it is added, his uncle had had the villany to drug him with a view to spoil his intelligence, (a simple process in a land of poisonous drugs); and he returned with a drooping heart and joined the Guru—whether at Sringeri or Kaladi, we are not certain.

And now we come to the most pathetic part of Sankara's life. Tradition is unanimous herein and there is nothing in the narrative to make it in itself improbable. We therefore have the narrative first and our remarks later on. Sometime after Padmapada left for Rameswar, Sankara, either longing to see his mother or having had news conveyed to him of the declining state of her health, left his disciples behind at Sringeri and went apparently all alone back to Kaladi. The mother was then bed-ridden and was of course exceedingly glad to meet him. He touched her feet in reverence—setting the rules

of Sanyasin at defiance. Being very ill and her thoughts all turned to the other world, she desired her son, whose fame had doubtless reached her ears, to discourse to her on things that might give peace to her soul. He began to talk of his philosophy, evidently underrating the difficulties of the average man or woman in grasping it. So the mother again desired him to chant and explain things which she could easily understand. Accordingly he glorified Siva in a few verses of his own. The messengers of Siva soon made their appearance, but their terrific shapes were too much for her and she refused to go along with them. Then Sankara praised Vishnu and his messengers coming down in bright and agreeable forms, she blessed her son, gave up the ghost and went along with them to the abode of Vishnu.

This seeming nonsense can easily be explained. *The God Siva has in post-Vedic times come to be regarded in two ways—either as a contemplative Yogi, serene and peaceful, like any image of Buddha, or in his terrific aspect of Destroyer of the Universe. The Sivite to this day repeats every evening a prayer called *Siva Kavacha* (the armour of Siva) and this popular prayer gives a rather sombre picture of the God. Brought up in Malabar and in the midst of such conceptions, it was no wonder that in her last (and delirious?) moments the mother of Sankara conceived Siva and his messengers as she had heard them described in *Sivakavacha* and elsewhere. She formed such a picture for the same reason that the ancient Greek pictured to himself the divine boatman, Charon, to take him across the gulf separating this from the other world; and her 'refusal' to follow them is a common spectacle in delirious cases.

The mother being dead, Sankara sought to fulfil the promise he had made her at the time of renunciation and perform her funeral rites himself. This however was not easy, for the whole Agraharam opposed it as being against Smritis and established practice, and Nambūthiris, of all the orthodox people in the world, are the last to suffer any such clear deviation to pass in their midst unopposed. If Sankara was a Sanyasin as he said he was, he had nothing to do with funeral rites; and if he persisted in doing them, he was clearly an impostor in the garb of a Sanyasin and must be hunted like a heretic and sinner. Arguing the affair in this manner the relatives of Sankara held aloof and in spite of his entreaties would neither help him to remove the dead body, nor, as tradition pathetically adds, let him have fire to burn it with. Unable to soften their Jewish hearts, he resolved rather than give up his promise to the departed, to do the rites without any body's help and girding

himself, bore the body of his mother either to the front or back-yard of his house and forming a pyre with dried sticks laid the body on it, made fire and performed all the rites pertaining to cremation. Tradition further adds that unable to remove the body entire, he mangled it and removed the pieces one by one—and, having found only stems of plantains to burn it with, he exercised his divine power and set them on fire.

The funeral rites over, he sought to find some means of revenging himself on his heartless relatives. Madhava adds an apology for this fit of anger and says, 'Although some of the deeds of the great do not seem to conform to Shastric rules ordinarily observed, they are not to be censured on that account.' Sankara is said to have persuaded the local chief to issue an edict prohibiting his relatives from chanting the Vedas and thus making them unfit to entertain Sanyasi-guests. They were further compelled to set apart, each *Illam* a corner of its own compound, to burn the dead of the family owning it and that every body should be mangled and then burnt!

Now it cannot be denied that Hindu Princes have often issued edicts, changing religious or social practices or the status of particular classes among their subjects. We have had any number of cases to illustrate this position. And there would have been nothing strange in what this local chief is alleged to have done at the instigation of Sankara, if we are sure that the latter had had sufficient influence at the court of this Prince to effect it. But, beyond a bare mention of a 'Rajasekhara' just before the Guru's renunciation, who on one occasion at that period went to the young Brahmin to have a view of one whose great learning had already begun to be noised abroad, Madhava tells us little from which Sankara's influence at his court might be inferred. The whole question of this supposed edict therefore, looks suspicious for want of conclusive evidence. It is a fact, however, which might interest many readers, that the Nambudris continue to this day the formality of mangling the dead body before it is removed to the burning ghat. A knife is made just to touch various joints of the body, though no real chopping or even so much as mere scratching, is done with it. It is also a fact in most, if not all, *Illams* of the Nambudris, a corner of the spacious compound attached to each *Illam* serves as a burning ghat for that particular family. And lastly it is a fact that some among the Nambudris do not learn the chanting of the Vedas. And, if called on to explain the origin of any of these practices, they repeat the story of the edict and say that the observances have continued so long as to be included in their

Smritis. Now, whatever we might think of this explanation in regard to mangling of limbs, it is possible to explain the other two features in other ways and show them as being due to simple convenience and some forgotten social revolution respectively. And the miracle about the burning of plantain stems might be dismissed as self-refuting since Madhava clearly refers to dried sticks.

If the tale relating to the funeral rites were true then it is clear that Sankara failed to play the prophet in his own land. There is but one difficulty however in the way of our admitting the whole of it as true. For, if Sankara's name and fame had spread so far and so wide, as we might naturally infer from the story of his tour and his controversies that we have recorded, it certainly looks very odd that, during the whole of this period, there was not a single disciple by to help him. This difficulty Madhava avoids by repeating a Yogic miracle—that Sankara having learned of his mother's precarious state by introspection, left every one behind and hastened to his home by an aerial path. But, as we have already agreed to reject such things, perhaps Anandagiri is right in placing the incident of the death of Sankara's mother at an earlier period in his life. Or it may be that Sankara had a few people with him, but all the same, felt the refusal of his relatives to do what, according to Shastric custom had become their legitimate duty, especially because they had been ready to share his substance at the time of his renunciation—felt it so strongly that he took steps either at once or later to have these ungrateful people punished for their boycotting him; in which case, we have to note it as one of his failings and wish it had not been. With this exception, however, the narrative relating to the funeral rites of Sankara's mother is exceedingly instructive as an act of rare filial affection, furnishing to common men one of the best illustrations of the text, 'Honour thy father and thy mother.'

Returning to Sringeri he set out some time afterwards with a large number of followers on a tour through the Eastern coast, stopping in important centres of learning, capitals of Kings or places of pilgrimage, to preach his doctrines or condemn the wicked practices prevalent. At Puri he established a mutt which still goes by the name of *Govardhan Mutt*. Kanchi (Conjeevaram) seems at that time to have been a stronghold of Sakta, whom Sankara is said to have argued out of their abominations and purified the temples—the preeminence that the goddess Kamakshi of Kanchi and Meenakshi at Madura have to this day preserved, would seem to bear out the prevalence at one time of Sakti worship in all these regions, but

it is dangerous to theorise too much. We are briefly told that in the course of this tour the Kings Chola and Pandya were won over, while the details quoted at wearisome length by the commentator of Madhava are historically worthless. The net result of the tour was that the abominations of the Sakthas, Ganapathyas, Kapalikas and the rest of their tribe received a check and permanent arrangements were made at Sringeri to periodically visit these regions to chase them away in due course. How long this tour lasted we cannot tell, but it must have lasted some years.

At length after making arrangements to carry on his missionary work in the South and after firmly establishing the Sringeri Mutt with proper staff, Sankara left once again for the North and passing through the Berars stopped for some time at Ujjain. From the Meghadūta of Kalidasa as well as from other sources, we learn that some kind of Saiva worship was prevalent there which needed the shedding of a good deal of blood. Madhava calls the devotees of this sect Bhairavas and with this sect Sankara began to argue and denounce their iniquities, which roused the fury of the mob and its leader who is significantly called Krakacha (a saw!). Madhava brings here once again King Sudhanvan already named and examined. The fact seems to be that Sankara had first won over the local chief to his faith and with his help put down the atrocities of the Bhairavas by force when argument proved of no use with them. Thence he passed on to Guzarat and at Dwarka established a mutt which is likewise in existence now and has some following. Returning he travelled along the course of the Ganges, in the course of which he is said to have won victories (dialectical) over many great names, Bhaskara, Bana, Dandi, Mayura and the like. But if the date we have accepted is the correct one for Sankara, many of these will have to be given up as inventions. He is also said to have gone to Kashmir to win the Seat of Learning meant as a prize to the wisest of men, but this information is useful only as showing that Buddhists could be found only in the Himalayan regions in Sankara's days. The last victory which seems to have much to support its reality was at Kamrup, or Gauhati, as it is now called, in Assam, where Sankara triumphed over the Sakta commentator *Abhinava Gupta*. This man felt his defeat so keenly that he resolved to be revenged on his opponent one way or the other. Accordingly he utilised his Black Magic and by means of it of caused Sankara to be afflicted with a very serious form of Hemorrhoids and though the latter did not care for a while, the disciples who were doing him

personal service, saw that the disease was growing upon him and consulted many doctors and tried many prescriptions but in vain. At length a messenger from Siva came and revealed the secret—that is, some enemy of Gupta. At once Padmapada was wroth and being a clever hand himself in the Black Art, soon undid Gupta's evil work and contrived to hoist the engineer with his own petard and the Guru felt whole from that moment.

This portion relating to the Black Art will not at this day be received without question. As we did in the case of the Yogic arts, it might be stated at once that it is immaterial whether we believe in Black Art or not. Malabar is still the land of such practices and there are other parts also where it is found more or less prevalent. In the case of Sankara, however, we need not call in the help of Black Art to account for the disease. Whether he died in his thirty second or thirty eighth year he had led a life of ceaseless activity, mental and physical, for a period of over twenty years and such a life must tell on any constitution, however strong, and some chronic illness developed and if it took a particular form in this case, it needs no explanation whatever. And although we are told that Sankara got cured, what followed soon after shows that the disease having become part of him, there was only some temporary relief, during which he managed to go to Badari and establish a mutt and build a temple to Narayana. After this he retired to Kedarnath. And here in his thirty second year as is stated by Madava and several others or thirty eighth as another tradition has it, (which latter is accepted by the present writer for reasons of his own) the great Teacher passed away about the year A.D. 828.

It is not proposed in this sketch to trace the fortunes of his system in times later than his own, or those of his successors at the various mutts established by him. In the first place, the materials are not available and in the next, the narrative is outside our limits. Suffice it for our purpose to say that the four mutts we have incidentally mentioned continue to exist in greater or less affluence after having had the usual ups and downs in the course of about twelve centuries. The Sringeri Mutt in our own parts, has known very bright days during the growth and development of the Vijayanagar Kingdom, but, it is to be feared, it has got but few valuable records to enable one to write its history.

But these Mutts, though founded by the same Teacher and for the same objects, have had but little connection with each other, administrative, social or spiritual. But at the same time there has been no rivalry known between any two of them, India having apparently been wide enough for all of

them to pull smoothly on. There has been but one small secession in the South caused by the establishment of a Mutt at Kumbhakonam, which has a limited following in Tanjore and the parts adjoining. That this movement is comparatively modern, can be proved easily, though its exact age cannot be ascertained. All these Mutts of Sankarite following, no less than the mutts of other sects, exercise, it is to be feared, but little influence for spiritual or moral elevation. Men seem to be hardly aware of their existence except on a few ceremonial occasions, when the disciples pay their *Sambhavanas* or honorariums to the Mutt or on occasions of the periodical 'visitations' of the Heads of these mutts, for what commendable purpose no man could guess.

It is now our business to examine the net result of Sankara's advent and labours. We have already taken note of what the tune was which was haunting millions of ears at about this time. We saw how Buddhism rose from among the Upanishads, grew and after a long life decayed in the land of its birth. But in regard to this decay we have to note an error in common belief. It is often said that Buddhism disappeared from India by persecution. We have ample testimony, however, to prove that this persecution is a myth. The Chinese pilgrim Hiouen Tsang and his evidence would alone suffice to prove it. If then there were no persecutions, how did it disappear? The answer is that it did not disappear at all but lost itself in the revived Hinduism. A long course of peaceful life side by side has led to many silent assimilations and borrowings—the practical abolition of animal sacrifices, gorgeous and elaborate festivals and processions, the owning of Buddha as an avatar of Vishnu, being some of those that lie on the surface. On the side of thought this process culminated in the most comprehensive philosophy of *Bhagavadgita*, which unlike the old 'exclusive' philosophy of the Upanishads, can be read by all classes of people and marked and digested.

Furthermore the most prominent failings of Buddhism had been noted and guarded against to save Hinduism from a like fate. For instance, the *Bakthi Marga* or the path of love and devotion to God, as explained in some of the most eloquent passages of the *Bhagavat* or *Vishnu Puran*, is an open protest against the Atheism of Buddhists. Again, while orders of monks were being slowly created in imitation of Buddhists, care was taken to rigorously exclude women from them, though a sorry and poor provision was made for their mental and spiritual needs in the shape of a few good, bad and indifferent Purans.

But this work done during the course of a long period and by hundreds, not thousands of heads and hands, and under different

circumstances, naturally resulted in the formation of a hydra-headed Hinduism. The list given in Anandagiri might not be wholly accepted, yet it is bewildering enough. We have already seen that they were all based on stray texts of the Vedas or Smritis and Puranas and that many of the sects had certain practices which were a disgrace to any name or religion.

Having been born and brought up amidst such circumstances, Sankara soon carved out for himself at a very early stage a clear and definite course. It was to give a common basis to the most prevalent forms of Vedic faiths and to reconcile all these to this cardinal idea. Hence his Pantheism, which sees the Great First Cause, the Essence of Intelligence everywhere about us and in us. With the help of this doctrine, supported as it is by any number of Vedic texts, it was easy for his master-mind to show wherever he went that the Sectarrians were narrow and illogical, and properly understood there was no real antagonism at all between the rival sects and no good ground for the rise of bad blood.

For our immediate purpose, we must be satisfied with a bare statement of his chief doctrines. He started with the hypothesis of a *Maya* or *Avidya* (or Ignorance,) which is external. Nothing really exists but the Supreme Spirit, so that what is commonly called nature (animate and inanimate) is but an illusion and dream, caused by this Eternal Ignorance which surrounds the Supreme Spirit, and hides It, "even as the smoke that rises from the fire hides the blaze for a time." Phenomena appear real for the same reason that things seen in a dream are real so long as the dream lasts or mother of pearl is mistaken for silver or a piece of rope for a snake, until the illusion goes away. The business of life is therefore to cast off the gross sheaths that surround the spirit within us and realise its identity with the Supreme Spirit. The chief means of attaining this end is the cultivation of true knowledge, that is, study of Vedanta and incessant contemplation of its teachings. Special emphasis had to be laid on this means as Sankara had found that Bhatta had 'bent the bow too much on the other side,' and held that the inanimate Karma or going through a round of formalities was alone sufficient to secure salvation. In all doctrinal passages therefore he gives prominence to the acquisition of Vedantic knowledge. But it does not mean that he rejected other means, for he accepted the Karmic road to take the soul to the heavens, though not to absolution. And nowhere in his writings is he more eloquent than in his songs in praise of the *Bhakthi Marga*.

The Supreme Spirit of Sankara is rid of all real attributes and the only positive statement that can

be made about it is that It is the Essence of Intelligence and bliss. This has led the author of *Manimanjari* to say that he has called Nothingness by the name of *Brahman*, and a recent writer to conclude that 'he retained the name of God to save his religion from Buddhistic Atheism. Now it cannot be denied that Buddhistic theology and philosophy had considerable effect on him, though it is hard to mark the extent of that influence. But in every sensible statement of Sankara's teachings one sees Pantheism and not Atheism governing them. And *Pantheism and Atheism* must always be poles apart, state it how we will.

The end of man being the realisation of the identity of his own spirit and the Supreme Spirit, and study of Vedanta and contemplation of its teachings being the best means for doing it, Sankara devised less difficult paths for people not fitted for that work. The practice of self-denial and other moral virtues, devotion to God and the careful discharge of each man's duties, as ordained by the Scriptures, were also declared to be preliminaries to acquiring in due course competency to the study of the Vedanta and realisation of its ideals. Man is to do his duties or go through Vedic rites, not because it will give him good things here or in the other world, as Bhatta had said, but because they have to be done; and at every step the Vedantist must bear in mind these words of the Gita :—

"The master of the sacrifice, who is Brahman has thrown into the sacrificial fire which is Brahman, the sacrificial rice which is Brahman, for the satisfaction of Brahman; and that which the master wants to attain is likewise Brahman!"

This comprehensive and pantheistic basis enabled the hitherto hostile sects to worship each its own deity as before, while it showed at the same time conclusive reasons for mutual toleration and friendliness. Sankara's mission in this aspect was therefore not to destroy but to fulfil, for it was 'by no means suppression of acts of outward devotion nor of the preferential worship of any acknowledged preeminent Deity. So when the admission was made that *Brahman* was the Supreme Spirit, the First Cause as distinct from Siva or Vishnu, the Teacher left undisturbed, *having regard to human frailties* the observance of such rites and worship of such deities as are either prescribed by the Vedas or works not incompatible with their authority.' Of these deities *five* had already become recognised as needing worship at the hands of every Vedic sect—the Bhagavata for instance mentions it—and the worshippers of these five comprised the bulk of the people, though each sect was sub-divided into a

large number of mutually repellant groups. They were the Sun, Ambika (Sakthi), Vishnu, Ganapathi and Siva. Everywhere at the conclusion of the wrangling, the precept given was the same—offer worship to the five Gods. This was how Sankara sought to unite these enemies and counteract their 'particularist' tendencies. It never occurred to him to talk as the advocates of some militant faiths have done, to claim all wisdom for himself and locate all folly in his opponents, and nothing but folly. It is for the candid reader to judge whether the result has justified the founder's expectations and whether his measures have softened sectarian bigotry and the consequent rise of bad blood.

As his plans were moderate and conciliatory, so was his method agreeable and perhaps about the best to be employed in such matters. Anandagiri is specially valuable in giving us a fair idea of what this method was. Wherever he went, he asked the leaders of thought who opposed him to state their case and explain their doctrines and practices. After they did it, he began to point out how far he could go with them—and in the case of most of them he could go with them some way, as they had based their faith on the authority of the Vedas. Next came the points of difference—philosophic as well as practical. Those who quoted *scriptural sentences* (as the Mallari worshippers did) from the Vedas in support of their objectionable doctrines or practices he could answer by quite a host of passages against them; and those who had based their evil doings on Smritis were told that it was a well-understood axiom that as against Smritis, Smritis could not stand, even as against Smritis Purans could not. One or two small instances must suffice to illustrate Sankara's method. The champion of Sun worship argued that that luminary was Supreme Spirit, because a well-known text said "This Sun is Brahman." But Sankara could quote any number of songs to the contrary, for instance, one which runs, "The Sun shines from fear of this (Brahman);" or again, "The Sun, the Moon... all shine with the light borrowed from this Supreme Light," and so on. The champions of Siva or Vishnu or Ganapathy worship were told that the particularism of each could receive no support from the Vedas, wherever else it could get it, and the authority of the Vedas herein was Supreme; and passage after passage followed in defence of this position. No wonder that, with this kind of tact as well as argument, he was able to influence thoughtful people everywhere. How different was this method from that which was pursued by many another guru of India or from the one pursued by our *Padri* friends and

people of their likeness! For they begin wherever they go by arrogating to themselves the whole truth and nothing but the truth, leaving to their opponents nothing but error.

We might now take a rapid survey of the chief practical reforms which the Guru was able to effect either himself directly or by means of his successors working on the lines sketched by him. They are from one point of view, of greater interest to us than his doctrines which can, at all times and in any conceivable case, be understood only by a few. We, Hindus of the present day must surely have a better idea than members of a progressing society, of the difficulties opposing change of any kind social or religious, be it the smallest detail or a purely personal affair. It becomes therefore a puzzle to us how any reform could have been made in this land and it leads us to doubt if any reform were made at all at any time. As has been stated just now, it might be that Sankara did not accomplish all the reforms ascribed to him during the short period of his mission, but that he sketched the lines on which his successors worked and, either by the force of their arguments or with the help of local chiefs who had become their converts, effected their objects. But it might also be that those days were more plastic than our own, because Hinduism was then living in close contact with an aggressive offspring of its own, which had even in its early days achieved astounding success, and both Buddhistic and Hindu Kings were freely issuing edicts introducing changes in faith or social practices. People therefore in those days and even long after Sankara's time could have had no idea of the crystallisation that has for two centuries, if not more, settled down over our life and, being accustomed to changes gentle as well as violent easily suffered their practices to change, whenever there was need of it. At all events the thinking portion had not in those days been brought up in the belief that the world had never changed and that every local practice absurd or 'surd' has remained just what it was in the days of Manu!

According to our 'original' authorities the chief reforms with which Sankara concerned himself were:—(1) Prohibition of marking the body with red-hot metallic types. Readers can easily understand what this means. The Sri Vaishnavas and Madhvas continue to this day to mark every child among them on the shoulders with the types of the conch and disc of Vishnu. Anandagiri makes a great deal too much of this reform and Madhava likewise lays much stress on it. And they go the length of making the Guru give very harsh words in reference to this practice. From what has been said at the commencement as regards the

circumstances under which these books were composed, we can easily guess the meaning underlying these unthinking denunciations—they are but the expression of the ill-concealed hatred of the writers to the rising Madhva sect. We are therefore justified in passing it over as being a comparatively harmless practice, though it would seem to be overdone in some cases.

(2) No sects that Sankara had had to contend with were found to have fallen so low in morality as the Sakthas and the Bhairavas. The former at this day are happily found but in a few localities, Assam being the most prominent of them, and the Coromandel coast shows stray cases here and there. The sect is, as is well known, 'divided against itself' and the *Vanachari* or left-handed variety of it is the most loathsome form that religion ever assumed. The *Dakshinachari* or right-handed have so far been influenced by the superior moral atmospheres surrounding them as to make their once detestable practices comparatively innocent 'to suit their iron age of Kali.' Thus instead of bloodstained flowers which their Book of Prayer wants them to use in their worship, red rose laurel has been substituted and instead of wine, the 'water' of the tender cocoanut kept in a copper vessel. The left-handed still continue to eat flesh and drink wine and have had a reputation for doing many other dark things, such as one might expect from people who help themselves freely to wine that is red. On some occasion in the year, a buffalo calf is slain as an offering to the goddess, though the pumpkin is often a harmless substitute. If in our days, these abominations have learned to hide their heads and are found only in some dark corners, no small part of the credit is due to the chastening influence of Sankara's teaching and his anxiety to put evil down. Anandagiri repeats the Guru's argument against them over and over, asking them how they could justify their practices in the face of Vedic precepts clear as the mid-day sun—thou shalt not eat stale meat, thou shalt not drink wine and so on.

As against the Sakthas, so against the worshippers of Ganapathy, by one particular sect among whom God is invoked by a sloka which decency forbids one to translate or paraphrase. In both cases, the worship of Sakthi and of Ganapathy was retained, but the sins connected therewith were condemned.

(3) If he used arguments against the Sakthas, he did not hesitate to use force, wherever he could, against the Bhairavas or Kapalikas, who in any age and under any circumstances would have deserved a like or worse treatment. Even if we make large allowances in their favour, the account we have of their ways is terrific and detestable and no one can have anything but praise to offer to Sankara for his

labours against this pest. At this day, there does not seem to be any Sivite sect anywhere in India claiming kinship with these pious ruffians if we do not choose to call the Aghoris so.

(4) Lastly, he organised Mutts and organised ten definite orders of monks, if not more, under the name *Danamis*, both in exact imitation of Buddhistic organisations. The continuation of the Mutts was provided for by the institution of monkish orders, while their *safety* was entrusted to neighbouring chiefs, who had usually become converts to the faith. The *Danamis* add at the end of their names any one of the following suffixes, *Saraswati, Bharati Puri, Giri, Thirtha, Asrama, Vana, Aranya, Parvata and Sagara*. This list is given elsewhere in slightly altered forms, though they are mainly identical. Some of the monks at the head of Sringeri Mutt have been *Bharatis* (the present incumbent is also one) and there was at least one *Aranya* in *Vidyaranya*. Based on differences in daily observances, as the class we have had is based on learning mainly, there are four other grades—namely, the *Dandis*, *Sanyasis*, *Paramahansas* and *Brahmacharins*. The *Sanyasis* are recruited from all castes and some rise to form *Athivarnasramis* (superior to caste observances) and eat with all classes of people without suffering for it in the estimation of the ‘high born.’ Evidently this order is a clear imitation of the Buddhistic rules which from their very beginning had forbidden caste scruples within the folds of the convents. The *Paramahansas* form the highest of these grades and one could attain to this grade only by a long course of holy life and the gathering of Vedantic knowledge; in other words, men rise to be *Paramahansas* by merit and Sankara himself writes invariably in the colophons of every one of his works, “thus is this finished which has been composed by Sankara Bhagavatpada, the best of perepatetic teachers of the grade of *Paramahansas* and the disciple of Sri Govinda Bhagavatpadaz.”

Profiting by the lessons which the inclusion of women by Buddha as *Parivrajikas* had taught and true to the old ideal of the *Smritis* under which women were never allowed independence, Sankara rigorously excluded women from his monasteries which were meant only as schools of learning, perepatetic teaching institutions and asylums for those men who had become vexed with the world.

The effects of these doctrinal and practical reforms have had a wide spread and far reaching importance. We have often heard it said that Hinduism has been unique in this that it has been able to assimilate alien faiths and include them in itself. Accordingly it has also been said that it is the most tolerant of the religions of the world. If

these statements are true, then the best expounder of this comprehensive and tolerant Hinduism was by general consent, Sankara. His followers are of course heterogeneous in composition, but taken on the whole they form, according to Mr. L. Rice of *Mysore Gazeeteer* fame and a host of others, the most tolerant of the Hindu sects. This then is Sankara's chief claim on our admiration. There have been reformers since then, some of them working in a wider sphere like Kabir and Nanak, who sought to unite the Hindus and the Mahomedans, but so far as toleration and breadth are concerned within the pale of Hinduism, subsequent movements must in most instances be called retrograde.

The one great weakness in Sankara's system might now be noted as having formed the underlying cause of subsequent secessions. We saw that he was forced to lay unusual stress on *gnana* or knowledge of god and, like Socrates of old, “seek to rationalise the whole Universe,” by reason of the extravagances of Bhatta. Now this knowledge is clearly not within the reach of common men, to whom, it is accordingly a sealed book. Then again, a little knowledge which is dangerous in all cases, is most dangerous here and gives rise to many devils who cite scripture for their own purposes. Further among the most learned in Sankara's Vedanta, a tendency has often been seen to make religion more an affair of the head than of the heart. And notwithstanding his great eloquence in praise of Bhakthi, the injunction given to the less gifted and therefore the great majority of his followers, to keep mechanically repeating, ‘I am Brahman,’ the great formula of Advaitism, is but a sorry substitute for genuine and intelligible Bhakthi. This, it cannot be denied, began to be felt in succeeding times and led to subsequent ‘Bhagavata’ movements in the twelfth and the following centuries.

Another charge against him has been brought by those who have been opposed to his philosophy—that he has read his doctrines into the *Sutras* of Badarayana or that he has coined *Sutras* of his own and inserted them into the old collection. The latter might be dismissed as worthless—it is simply impossible. But the other has been regarded as very serious and no less an authority than that got by the joint testimony of the late Justice Telang and Dr. Bhandarkar has been quoted to prove that he did, with a view to show it away as a discovery and perhaps to discredit Sankara's philosophy. But we already saw that not merely Sankara, but every other philosopher or poet has had to inhale much before he could exhale, so that his commentaries of the

Vedanta Sutras include not only the meaning of the original author of the Sutras but all the explanation that had been given by subsequent 'scholiast' together with his own peculiar tenets. There is no marvel here to the student of history, for if this were a charge, then all the commentators have to bear the same blame. Let us not believe in 'avatar' theories, and no ghost need come from the grave to tell us that great men, no less than little men, "can never escape from the influence of the process in which they form part." And as for the Sutras, it is part of their nature to be in themselves elastic and unsupported by tradition; nothing can be made out of them.

During the last fifty years, if not earlier, Sankara and his philosophy have received additional importance as has been already hinted, by the zeal of Western scholars and the Theosophists, and the sudden rise of admirers in lands of which Sankara could never have dreamt. His philosophy is being subjected to the usual processes of comparison and contrast wherever its study has been taken up. If it can continue to stand these tests in future as it has done in the past, there is certainly a brighter future before it, in which case we shall value it on that account; if however at any future date, the human mind should outgrow its limits, we shall value it then as an important step leading to that growth.

Meanwhile, whatever the future fortunes of the philosophy, that of the philosopher needs our tender care and an authentic life of Sankara should be the concern of every admirer of the Guru. The *Sasans* or copper plates of grants lying uncared for in the various Mutts and any other old records that might be forthcoming should be diligently searched for facts and with the help of these and of such side lights as archæology is able or might be able to throw on this subject, a memoir worthy of Sankara, which is neither more nor less than to state facts just as facts, reconstructed by the true admirers of the Guru. And their Holinesses of the Mutts of Sankara have no better mission before them than to further the efforts of those who would do something in this line. Meanwhile, the writer of this paper will feel amply recompensed if it should chance to induce one additional hand to work in the field of historical resources bearing on religious reforms and reformers.

C. N. KRISHNASWAMI AIYAR.

THE PROPOSED MUSSALMAN UNIVERSITY.

LIKE the inception of every other progressive movement which is now being practically worked out by modern Indian Mussalmans, the idea of a separate University for his co-religionists is also to be traced to the brilliant intellect of the late Sir Syed Ahmed of Aligarh. It was his plan at first to spread the knowledge of Western science and literature among his countrymen by means of rendering into Urdu the more important works of European authors. But a few years' experience sufficed to show him conclusively that translations, however carefully made, could never maintain the spirit of the original, and that, unless European authors were studied in the precise language in which they wrote, it was no use expecting that he could infuse into the life and thought of his nation that liberal spirit of charity, that supreme desire for being practically useful and that noble virtue of untiring industry, which their moral and social regeneration essentially demanded. His visit to England strongly impressed upon his mind the beneficial effects of a liberal education on European lines. As its result, before he returned to India he had, with the valuable help and co-operation of his gifted son—Mr. Syed Mahmood—conceived the plan of establishing at Aligarh a Mussalman University on a small scale, calculated to impart to its students instruction not only in European sciences and arts, but also in that literature and philosophy on which rested the historic fame of his ancestors. Though Sir Syed had thus resolved on founding a separate educational institution for his co-religionists as the only means that would work out their material salvation, he did not set himself to this stupendous task until he had made sure that he was correct in his ideas. In 1870, he formed a committee whose object it was to find out the true causes of the educational backwardness of the Mussalmans and devise such means as would effectively remove the same. This Committee invited public opinion on the subject and in response received as many as 32 learned essays from gentlemen who could speak with authority on matters relating to Muhammadan education and progress. A select committee was then appointed to consider these documents and after 2 years' labours, it submitted its report in April, 1872. It recommended the establishment of a national institution which could meet all the special requirements of the Indian Mussalmans and which, though beginning as a small college preparing candidates for the

various examinations of the existing Indian Universities, would in course of time develop into a large University itself with power to hold its own examinations and grant its own degrees. Accordingly, in 1877, a school was founded at Aligarh which has since expanded into the Mohamedan Anglo-Oriental College. The history of the gradual progress of this institution, as has been uniformly observed by the large number of learned gentlemen who have inspected it from time to time—the latest among these being the University Commissioners, reflects great credit on the genius and tact of those that have been successively responsible for its management. The remarkable success which the Aligarh College has attained up till now, far from flushing its authorities with pleasure and pride, has rightly served to turn their attention to the ambitious end which its founder had in view; and now that he is dead and gone and people are enthusiastic about perpetuating his memory in a suitable manner, they have resolved to take this opportunity and make one supreme effort to carry out their object—the raising of their college to the status of a University.

The proposed University, it is agreed, is to be of the historic type,—like the *Dar-ul-ulooms* of the Muhammadan past or like the well-known Universities of Oxford and Cambridge. It is not merely to be an examination board like the present Indian Universities, but is also to exercise a living influence on the life and character of its *alumni*. It will be based on the residential principle. Students will have to live in University premises where, besides study, every movement of theirs will be subject to strict supervision by their professors. The food they take, the habits they form, the society they keep, the games and the books they amuse themselves with,—in fact, every thing that enters into their life will be carefully looked after and no endeavour will be spared to give them the best of everything they require. Their bodily development will have as much consideration as the discipline and improvement of their minds. Special attention will be devoted to the moral and religious culture of the Mussalman students. Thus, the students will here acquire a training—physical, mental, and social—which is conspicuous by its absence elsewhere in India.

It is perhaps too premature to consider the details of the several courses of study that will be pursued in the proposed Mussalman University. Nevertheless, it may not be out of place to remark that it is expected that specialisation will be allowed to a great extent. Oriental studies will be largely encouraged and efforts will be made to advance literary research in Arabic, Persian and

even Sanskrit. It is proposed to teach not merely literature, but also sciences and arts of every kind. Having regard to the poverty of the Indian Muhammadans, technical and industrial education will not be neglected, for the authors of this propaganda firmly believe that these alone will restore the past greatness of the country*. Thus, the Aligarh University will be a People's University—an institution where Mohamedans of all classes could learn whatever they might desire or feel as necessary for attaining success in after-life.

The ordinary course of instruction in the proposed University will, as elsewhere, extend over a period of 4 years; but during this time, the students will not be plagued with college and University examinations as they are in the existing institutions. The syllabus will be so arranged as to keep up the standard of the examinations of the new University on a level with that of the corresponding degrees of the older Universities, although it is thought that, by an internal arrangement of the faculties, students will be allowed to select English either as a compulsory or optional language as they please.† Before taking his degree every student will have to go through a course of religious training. *Shiaks* and *Sunnies* will have special courses prescribed for them in this connection as the peculiarities of their religious tenets may necessitate.

How is it intended to bring about this great institution? All by the expansion of the present Aligarh College, both in the number of its staff and that of its students, by a slow process of gradual growth. Fortunately, the M. A. O. College has been founded on the right lines for such development. It is a residential College. Its students live in large quadrangles as in Oxford and Cambridge. The houses of its professors are situated in the College grounds and they exercise a salutary influence on their students by mingling with them in their Clubs and Societies out of college hours. Besides, in the short period that it has existed, the College has developed healthy traditions and a very strong *esprit de corps* binds together the present and past students. Moreover the College is supported by the Mussalman world at large, its students coming not only from all parts of India, but also from Baluchistan, Burma, the Andamans, Africa and other distant parts of the globe. We may say, therefore, that Aligarh has already got the nucleus of a Mussalman University. The Trustees of the Aligarh College believe that they will have material enough for a University*.

* Vide Prof. Brown's speech at the Madras Conference.

† Vide Nawab Mohsin-ul-Mulk's speech on Sir Syed Memorial, delivered at Lahore on the 25th June, 1898.

"by providing sufficient accommodation for at least one thousand college class resident students with all the necessary arrangements for their religious and moral training, medical attendance, sanitation and athletics; a staff able and competent to teach such a large number of students; a good library and equally good laboratory; a fund sufficient to found a certain number of Fellowships on the model of Oxford and Cambridge Universities."

These are noble ideas, indeed; and it is sad to think that, under the present circumstances, they look like nothing better than dreams; for the inauguration of the proposed University needs an amount of money—the lowest estimate yet made goes up to ten lakhs of rupees—which it is hard to raise from among the community. Even the original programme of the College has not yet been fully carried out. A number of buildings are still lying in an unfinished state; the strength of the present staff is insufficient for the work it has to do; while the existing arrangements for the moral and religious training of College students are not adequate and those for sanitation and physical exercise are capable of considerable improvement. More than four years have elapsed since the University scheme has been definitely formulated; all this while, Navab Mohsin-ul-Mulk and his host of energetic lieutenants have been exerting their level best to raise the money necessary for carrying it out; and yet, not more than a lakh and thirty one thousand rupees have been collected up to date. This is not at all encouraging. Still, when we look to the past, the wonderful work of Sir Syed in successfully bringing into existence, against all the apathy and prejudice of an united nation, a model college like that of Aligarh, exhorts us to work towards completing it as he intended with that singleness of purpose and determination to persevere in spite of difficulties and disappointments, which is so necessary for securing success in every noble and disinterested cause.

The success of the proposed University when it is once established need not be doubted at all. The Trustees of the Aligarh College have declared that they will not move in the matter until they have at least 1000 College class residential students. Later on, it is expected, this number will swell to a great extent by the inspiring influence which the existence of a large institution like a university will have upon the minds of the community. Moreover, all the Muhammadan educational institutions now flourishing in the country—like the Islamiyah College of Lahore, the Muhammadan College of Karachi, the Anjuman School of

Bombay and others—will, it is believed, adapt themselves to the model of the University and get themselves affiliated to it. Add to these the prospect of the University attracting students from foreign Mussalman countries, and we may fairly say that it will not be a failure from a numerical point of view.

There remains another important question to be considered. When all the materials necessary for founding the proposed University have been collected, will the Government grant it the charter without which its degree will be valueless in the eyes of the public? So far as can be gathered from the speeches delivered at Aligarh by successive Viceroys, there is no reason to doubt that, when the authorities of the proposed University are able to prove satisfactorily that its degree is to be conferred on people who are in no way less efficient than the graduates of other Indian Universities, the Government will have no objection to grant them the required charter. Indeed, the idea of a separate Mussalman University has been nourished and fostered among the community by the hopes successively held out to them by their rulers themselves. Almost every distinguished European visitor to the M. A. O. College has expressed sentiments like the following of Sir Antony Macdonnell's:—

"Before I conclude" said he on the occasion of his visit to the College in 1896, "I must wish this College every success. I wish it all the success which was hoped for in the eloquent words addressed to Lord Lytton when he laid the foundation-stone nearly twenty years ago. It is not too much to hope that this College will grow into the Mohamadan University of the future; that this place will become the Cordova of the East and that in these cloisters Muhammadan genius will discover, and under British protection, work out that social, religious and political regeneration, of which neither Stamboul nor Mecca affords a prospect."

It has been said that Government should not give its charter to the proposed University, because by doing so it would be encouraging sectarian institutions. Though I yield to none in wishing that the conglomeration of various races inhabiting the Indian peninsula be welded into a homogeneous mass, I fail to see how, for the sake of attaining that ideal, we can dispense with institutions which are calculated to satisfy the special requirements of a special set of people. It is for some such reason, I believe, that Government does not withhold its aid from national schools and colleges; and why should not the same principle be extended to universities also? The proposed University will aim at satisfying those precise conditions the absence of which in the existing institutions has led to the educational decadence of the Indian Muhammadans.

and so long as it discharges this function without impairing the standard of general knowledge which the candidates entitled to receive university degrees ought to possess, it is not clear why it should be objected to. It is feared that if the Muhammadans were allowed to have a University of their own, people of other nationalities also would like to have similar Universities instituted for their benefit. Even if this were the case, why should you stand in their way? In a vast continent like India, a dozen Universities will not indeed be too many; whereas it will certainly be the better for having a number of Universities which, while all clinging to a common standard of general efficiency, will each be engaged in training up the young men under its care and guidance to be a better informed class of people than they would be otherwise in a particular department of knowledge.

Before concluding, let us summarise all the positive benefits* which would accrue to the Muhammadan community from the establishment of the proposed University:—

(1). It will be a means of spreading among them higher English education in which they are so backward. Directly, it will do this by founding scholarships for those who could not otherwise pay for their education. Indirectly, it will operate on public opinion and rouse from lethargy and negligence those people who could, but do not, educate their children. And the diffusion of English education among the Mohammadans will, it is believed, render them quite efficient for succeeding in the struggle for existence and check their moral, social and intellectual decay.

(2) It will introduce among them a higher type of education than obtains in the country. It will not merely give its graduates a quantity of information, but make of them a set of thinking people; it will foster among them a strong *esprit de corps*; and it will develop in them a manly spirit of devotion to duty,—all of which combined will render them better adapted to succeed in life than the graduates of the existing Universities.

*(3). Just as the medieval Universities of Christendom have been the means of preserving the classical literatures of Greece and Rome, just as they have helped Europe to assimilate what was best in their civilization and culture and just as they have largely contributed to the unparalleled advance which the West has made in arts and sciences, even so it is possible for the proposed University to preserve for Islam the peculiar culture which she

developed in the palmy days of her history, help her children in assimilating not only the best elements of her past civilization but also those modern sciences and arts a knowledge of which has become a condition of human existence in the present age, and contribute to their revival and greatness after the model of progressive peoples like the Japanese. The learned calculations of the ancient Arabs, the sweet melodies of Hafiz and his countrymen, the beautiful productions of art as witnessed at Agra, Bijapur and other Mussalman cities of Hindustan,—these are some of the relics of Islamic civilization which deserve to be preserved. The proposed University will undertake this function. Besides, there are various other duties which the Aligarh University is expected to discharge when it comes into being. It will develop Urdu, the *lingua franca* of Indian Mohammadans, and adapt its literature to the spirit of the times. It will raise up poets like Hali in large numbers and they will employ their divine art in the cause of national upheaval. It will encourage Oriental Scholars like the profound Shibli to make researches into the domains of Mussalman history. It will help to produce in the current languages of Muhammadan countries valuable works dealing with Islamic civilization and culture such as are now found only in France and Germany. In the interests of Mussalman progress in general, it will tend to create an intelligent type of Moulavies, versed in modern science and literature as well as in the classic learning of Arabia and Persia, to take the place of the bigoted Mullahs as the religious leaders of the people. These are functions which only a Mussalman institution can discharge and constitute considerations which must appeal most powerfully to the Mussalman feelings of nationality and patriotism; and the Aligarhians trust that for these if not for anything else, their proposal to establish a Muhammadan University will have the ungrudging support of the whole Islamic world.

* See Annual Report of the M. A. O. College, Aligarh 1896—1899, for a detailed treatment of this subject.

SHAKESPEARE'S HAMLET AND THE WASTE OF LIFE.*

SHAKESPEARE'S insight into human character is nowhere deeper and clearer than in his

Hamlet. Probably his *King Lear* and *Macbeth* are more perfect. They are master-pieces of the dramatic art: they show that the dramatist has grasped with the instinct of a true poet the effect of the sinister influences which love of power exercises upon human nature when opportunities are afforded for its attainment. Shakespeare had a different matter to deal with in *Hamlet*. Here was a subject which was not amenable to outside influences and which had to work its destiny out not by the attainment of temporal power but by satisfying the inward cravings of the soul. Hamlet did not want to rule over Denmark. He cared not who ruled provided treachery and infidelity were not in power. He might soon be King himself, but that was not what he craved after. He saw infamy and shame in the land and he was not at peace with himself. That was the nature of the man whom Shakespeare chose for his hero. It may be that the play is not as well-finished and as truly dramatic as the others are, but there is no doubt that in the development of the character of this prince, the poet had a far more difficult task before him; and if Hamlet to-day is the most popular of the plays of the greatest poet of any age, it only shows the cosmopolitan character of the genius of the author. It is not an easy transition from the *Merry Wives of Windsor* to *Hamlet*, and if both Falstaff and Hamlet are equally attractive, and equally suggestive, the mind that was capable of creating both of them is truly entitled to take the first place in the world's roll of distinguished poets. *Hamlet* is the widest known of Shakespeare's plays. It is the most quoted. There is more philosophy in its teachings than in all the rest of the great dramatist's plays. It looks as if in the fullness of his wisdom Shakespeare began to doubt much that he had given expression to in his earlier plays. His optimism and cheerfulness as evidenced in the earlier dramas give way to despondency and despair. The mind that saw "books in the running brooks, sermons in stones and good in everything," begins to exclaim "there is a destiny that shapes our ends, rough-hew it how we may." This looking up to something which guides and controls mandates not by itself show the pessimism and despair which are the marked characteristics of Hamlet's personality. But there is the beginning of a

new line of thought which ultimately creates the misanthrope Hamlet. To Hamlet life is a burden from beginning to end. He is afraid to commit suicide because he is not sure that after death there may not be something worse than all that man has to endure in this life. He is haunted by the fear that the unknown may possess more terrors than the visible world. It is this morbid feeling of insecurity, and it is the want of confidence in something higher that will sustain man in his ordeal through life that are accountable for Hamlet's failure in life. Dr. Miller says that the central idea of the play is the failure of the hero to rise to his sense of Duty: Goethe thinks that Hamlet sank by the weight of the heavy responsibility which he undertook and for which his strength was unequal: "This beautiful, pure, noble and most moral nature was fit to accomplish much, but not the thing that was given it to do." That was Goethe's view of Hamlet. Undoubtedly Dr. Miller's estimate of this melancholic prince is more real than the German philosopher's. There is yet another view—not inconsistent with either of the above—which seems possible of the character and capacity of Hamlet. It is true that he was not equal to the task which he wanted to accomplish. It is equally true that he failed to rise to the sense of his duty. Why? Because he was wanting in the faith, in that Sustaining Power which alone can enable man to make head amidst failures and disappointments, and against difficulties and dangers. Hamlet had no faith in God. Hamlet's attention is drawn to the rottenness of the state of which he is the heir-apparent, his suspicions of the infidelity of his mother are gaining strength, and his rooted antipathy to the fratricide who is guilty of murder and of incest is pronounced. He would fain root out the evil that has been wrought; he would rid the kingdom of the man who has made it the hot-bed of vice and of corruption. But the vastness of the undertaking staggers him. He groans under its weight and instead of endeavouring to bring about the denouement which he has so much at heart, he wails pitifully and soliloquises upon self-destruction. He loses courage and sinks. His is a despairing soul which finds no possibility of sustaining vigour from any higher source. There is some resemblance between the position of Hamlet and that of Arjuna just on the eve of the battle of Kurukshetra. Arjuna's despair is not due to a feeling that he is incapable of accomplishing what he undertook. No. He despairs of any good resulting from the doing of the work that he vowed to do. He momentarily forgot that he was simply the instrument under the guidance of a Higher Power. He soon recovered self-possession and

* SHAKESPEARE'S HAMLET AND THE WASTE OF LIFE by the HON. REV. DR. MILLER, C. I. E. Principal of the Madras Christian College. Cloth bound, One Rupee. G. A. Natesan & Co., Esplanade, Madras.

appealed to the Power behind the warrior's shield and weapon. His doubts were cleared and the line of his duty was pointed out to him. To him came the clear voice of *Sri Krishna* bidding him to do his duty without caring to calculate the effect which it would produce: "You have nothing to do with the results that may be achieved—you have to do that which you ought to." That is what *Sri Krishna* told the great warrior. *Duty for Duty's sake* was the lesson which was inculcated and Arjuna no longer despaired. Hamlet had no such schooling. He did not do his duty because he thought he was incapable of achieving good results. He wrecked his life by calculating upon consequences. If it is right to do a thing, one must do it. The nature and extent of the remedy which the action will result in should not stand in the way of duty being done. That is the central lesson of the *Baghavat Gita*. That is the principle which prince and peasant, warrior and statesman, the rich and the poor can each carry out in his vocation. It is only by imbibing this lesson and applying it in the daily concerns of each man's life that despair can be overcome and progress can be made. A single individual however well-placed and well-equipped can accomplish but little in setting right abuses and in remedying injustice. On that account, he is not to sit quiet with folded hands. He has to do his duty. He has to regard himself as the instrument of the all pervading power which works for good. He has to lend his helping hand in the good cause. The possibility of failure to achieve results is no concern of his. It was in this spirit that Lord Gautama worked. He saw everywhere misery and oppression—hatred and prejudice, selfishness and avarice. A prince born to enjoy ease and comfort, he saw that everything about him was steadily leading to ruin. The prospect was gloomy—the difficulties were very great. But he was no Hamlet. He did not despair. He would do his duty. He would preach good will to all mankind. He would exhort everyone to speak the truth, to live honestly and to injure no one. He cared not what triumphs his crusade against evil may bring him. He had his call to duty and with his faith in God he set to do his allotted work. It was the same with prince Prahlád. It was not so with the prince of Denmark. Hamlet failed where Gautama, Buddha and Prahlád had succeeded. All three of them were good men and true. The Indian student can easily see why the third failed where the other two succeeded. The Hon'ble Dr. Miller has done a great service to Indian students by drawing their attention to the unique character of

Hamlet. It is only necessary to point out that they should contrast the failure of Hamlet with the success of Buddha and Prahlád, and then they will find no difficulty in getting at the truth. As the Reverend Doctor points out there is much to attract the Indian student to a study of Hamlet. His passionate denunciation of his mother's conduct has something oriental in it. The Indian student can recognise in the burning shame felt by Hamlet in the unnatural conduct of his uncle and in the heartlessness of his mother, traits which are the common characteristics of himself and of his people. The reckless and calumnious pronouncement of Lily notwithstanding, nothing upsets a Hindu more than infidelity among his relations and nothing makes him more dissatisfied with life than the knowledge of the incontinence of those whom he has been bidden to worship and revere. An Indian can therefore sympathise with the heart burnings of Hamlet. But that is all that is oriental in Hamlet. His longing for self abasement and self destruction will not appeal to a Hindu. The Indian, if the teachings of ages are not entirely lost on him, has to set to work to remedy the evil, no matter what modicum of success may result therefrom. Everyman has the potentiality of the Supreme in himself. That is what he has been taught, and therefore there is no room for despair.

The learned Doctor has made a study of the other characters in the book as well. The reason assigned for the antipathy shown by Hamlet to Polonius deserves some attention. Polonius is not a bad man. "This pattern of self satisfied officialism" as he has been called has some virtues; but Hamlet's attitude towards him was one of studied disrespect, if not of hatred. The reason was that Hamlet thought that in the then state of affairs the red-tapism of the first minister of the crown was entirely out of place. The straightlaced official has his place in times of peace, of prosperity and of plenty. But when things are out of joint, the babblings of the decorous placeman is certainly unwelcome. Hamlet knew that he had to count not only against the villany of his uncle, but also against the stupidity and irksome commonplaces of his minister. That was the cause of his hatred. The other characters have also been sketched with inimitable truth and the virtues and foibles of each have been set forth. This is a book which every Indian should study and ponder over. The author of the play, the subject commented upon and the critic make this book invaluable to the student of literature.

T. V. SESHAGIRI Aiyar.

The World of Books.

OUR EMPIRE UNDER PROTECTION AND FREE TRADE by Sir Guildford L. Molesworth, K.C.I.E. (Ward Lock & Co., London.)

This small and unpretentious book is an attempt to demonstrate the baneful effects that have, according to the author, followed the strict adherence by England to the Free Trade doctrine. It also professes to make a plea for a commercial federation of the British Empire, for the realisation of which "a great opportunity is now afforded." The author refutes every theory that has been put forward by Free-Traders in favour of their policy and proves, by means to a large extent of statistics, how every one of their prophecies with regard not merely to the industrial future of England but also to the future of the world's commerce has resulted in failure. He begins his attack on Free Trade by referring to the ridicule to which the Manchester School of Economics has been subjected by modern economic authorities and proceeds:

"Free Trade, so called, has had a patient trial of more than a half a century, and it is now time to take stock of the results, in order to see how we stand. The results may be briefly summed up as follows:—Under our policy of Free Trade we have lost that commercial and industrial superiority which we acquired under the policy of strict protection. Our policy of direct taxation bears heavily upon our industries, and reacts on the working classes in reduction of wages and employment. Our agriculture has been ruined, and our industries are struggling hard for existence. Other nations, under a policy of strict protection, are beating us in the race of competition, not only in neutral, but in our own markets. The policy of Free Trade has not secured for us either the cheap loaf, low prices of provisions, or reduced cost of living; for all of these have been equally secured by nations under a strict protective policy. We have sacrificed the substance for the shadow."

The pages that follow are merely a demonstration by means of statistics of the statements above made. The author traces the Economic History of England under a strict policy of protection and shows how "during that period the trade was of a far more healthy character than at present; for, at the end of this period, in 1846, we had a *favourable* balance of trade amounting to £66,000,000; whereas now we have an *adverse* balance of £168,000,000."

He then proceeds to show how the English people maddened by the enormous prosperity which had overtaken them during that era gave in to the Free Trade *doctrinaires*. But the first step in England's Free Trade policy was not made without remonstrance from men of acute vision. "In vain it was urged that it would throw land out of cultivation; that it would in-

volve dangerous dependence on foreign supplies, and heavy taxation on England's industries." But these warnings remained unheeded owing to the start which England had in the race of commercial competition which for a time delayed the realisation of these ominous prophecies. The economic history of England since 1846 is then traced in order to demonstrate how ruinous has been the pressure of England's Free Trade policy on her industries, and upon agriculture in particular. Nearly 3,000,000 acres of lands went out of cultivation between 1868 and 1893 and property, purchased during prosperous times, for £8,000, has been sold for £420. The doctrine of comparative progress, that is very often put forward by present day apologists for Free Trade, is vigorously handled by the author. The figures he adduces to rebut this contention sufficiently bear out the statement that while England's "share of the increased activity of trade during the last ten years is represented by less than a million, that of the United States is represented by nearly £85,000,000; and, whilst our increase of exports is represented by $\frac{1}{3}$ of one per cent. that of the United States is represented by $48\frac{1}{2}$ per cent."

The author, however, is not content with instituting a comparison between England under Free Trade and England under Protection—a comparison which is very much in favour of the latter. He proceeds to trace the economic history of the United States and the whole burden of his paragraphs on "United States under Protection" is that all the prosperity and progress in the field of industry and commerce that that country has achieved is due solely to her policy of heavy tariffs on foreign goods; that, during the short intervals that saw her veering round from her policy of strict protection, were times of great depression in trade and general distress. "If America had pursued the policy of free imports she could never have developed her manufactures. She would have remained a huge agricultural country, exchanging her agricultural produce for our manufactures; even as it is she experienced the greatest difficulty in developing her resources." The starting of new industries especially was rendered extremely difficult owing to English competition but the imposition of high tariffs supplied the proper remedy for withstanding this unequal competition. The following results attained in the tin-plate industry alone will give a fair idea as to how generally the system of heavy duties has worked in the Economic Evolution of America.

"A new industry has been developed; capital has been attracted to the United States; the price of tin plates has been lowered to the consumer, the wages of

workmen have been raised; a large revenue has been obtained from the duty on tin-plates, saving other taxation; and the money which formerly went abroad circulates amongst the different trades in the United States."

The repeal of the Corn Laws has, according to Sir G. L. Molesworth, not resulted in cheapening the price of wheat. The present fall in the price of wheat is not due to the repeal of the Corn Laws for the fall has occurred in Protectionists' countries as well, and in a greater degree even. The distress which led to the agitation of 1846 was not due to the Corn Laws at all but to the action of the Bank of England which in order to escape insolvency borrowed from Paris Bankers to the extent of £ 2,000,000 and subsequently contracted its currency in self-defence. This produced a monetary crisis and a general depression of all industries ensued. "The distress was not caused by dear bread, but by want of money to purchase it. It was a money famine not a bread famine."

The contention of Free Traders that the adoption of a Free-Trade policy has resulted in an increase of wages and an increase of the labourer's comforts is then attacked and refuted. By a comparison of the relative increase of wages in different countries, it is found that England occupies the lowest place. A comparison of the average of weekly wages in 102 different employments in England and in the United States reveals the following:—"the average wage for England is equivalent to \$ 6.27, whilst that of the United States is \$ 12.5." Nor has the cost of living diminished in England. Comparing the cost of food and other necessities in England and in Protectionist Countries, it is found that it is greater in the former than in the latter.

The incidence of an import duty is the next topic handled. According to the author

"It may, perhaps, be laid down as a general axiom—subject, of course, to modifying influences that when an article is, or can be, produced at home, a tariff stimulates production and does not raise the price, the tax being paid by the foreign producer; but when an article is not of home production..... the tariff increases the price and the tax falls on the consumer."

What England does is the exact reverse. "We remit the tax which would be paid by the foreign producer, whilst we exact that which falls upon our own subjects." England's system of taxation rests on a false basis. The policy of direct taxation which England pursues in order to relieve the working classes of its burden falls mainly on the capitalist class, or, in other words, on industries. And this ultimately reacts on the working classes, wages are reduced and poverty and distress follow.

Adverting to the balance of trade, the author shows how England has managed to pile up the huge deficit of £1,68,000,000. He is very hard on Free-Traders in this connection.

"It has been a favourite trick of the advocates of Free Trade to add together the imports and exports under the head of 'volume of commerce,' and to exhibit the total increase of volume as incontestable evidence of increase of prosperity under Free Trade. It would be equally reasonable for a man of business to add together the debit and credit sides of his banking book, and produce the total in evidence of a profitable business."

Space forbids us from quoting more from this really instructive little book. It is full of information, reasoning and facts. The question of commercial federation, of preferential tariffs and of the institution of an Imperial Zollverein are but very briefly touched upon by the author but one can very plainly see the trend of his reasoning. The book is purely from an Englishman's point of view. It attempts, and establishes the position that, so far as England is concerned, her salvation depends upon a closer commercial union between the different parts of the Empire.

"If our Empire is to be saved, it must be by the strong effort of a wide, comprehensive policy, which will knit our colonies and dependencies into one mighty Federation under an enlightened system of fiscal reform—a Federation homogeneous in character, unselfish in aims, and united in policy, protecting every industry, seeking every possible means of employing the labour and developing the resources of all; fostering every industry when it needs fostering, and relaxing the fostering care as soon as it is seen to be unnecessary; protecting only to the extent that may be needed to prevent the decay of an existing industry, or to enable a new one to spring up, the primary aim being to utilise the labour and produce of the whole, and to ensure an enormous market in our own great united Empire."

STATE INTERVENTION IN ENGLISH EDUCATION by Mr. De Montmorency:
(Cambridge University Press.)

This is a book on the history of the efforts made by the State in different times to control, regulate, or develop Education in England. It begins with the days of Alfred and brings the story down to 1833 when Parliament by voting £ 20,000 for the erection of school houses in Great Britain recognised the modern idea that universal elementary education is a national concern. It is a story of absorbing interest, showing through what vicissitudes education has had to pass before achieving the triumph of the compulsory principle.

As may be guessed, the State and the Church have alike been changeable in their attitude towards education, now co-operating, now mutually opposed, at one time to repress, at another to encourage. Courts of justice have from the first played a large, though fitful part, in emancipating the educational movement from the control of the Church. It is wonderful to see how many popular ideas and judgments have to be abandoned when patient research like our author's is brought to bear on original records. Mr. De Montmorency proves, for instance, that the pre-Reformation period in England had done more for popular education than is generally supposed. He shows that the Tudor kings threw away the great opportunities that had been bequeathed to them, and that Henry VIII. in particular "in his haste to root up the tares, destroyed more wheat than he or his children were able to sow again". The reign of Edward VI. too, commonly connected with the foundation of some teaching establishments, witnessed the destruction of many grammar schools "in the floods of the great revolution which is called the Reformation". Elizabeth, however, added to her other glories great solicitude for the advancement of learning in the land and a conviction that it was a national matter. In fact it is in one of her statutes that we find the word *Education* first used in any written or literary record in its modern meaning. The statute bears date 1571 and its object was the incorporation of the Universities of Oxford and Cambridge. The word occurs in the stately preamble: "The maintenance of good and Godly Literature and the vertuous Education of youth". The Oxford English Dictionary, not aware of this Act, gives 1616 as the earliest date on which the word is used in our sense. Even Shakespeare's use of the verb 'educate' in *Love's Labour's Lost* Act V. Sc. 1, belongs to the year, 1588,—at least 17 years later than the date of Queen Elizabeth's statute. The first grant ever made by Parliament

for education was in the time of Cromwell, whose beneficence extended even to those centres of disaffection, the Universities of Oxford and Cambridge. In 1649 the first fruits and tenths created by Henry VIII were devoted to the cause of education and the important provision was added that, if these sources of revenue did not come up to £20,000 annually, some other sources of revenue should be taxed to make up the deficiency.

The restoration of the Stuarts, however, brought a time of depression to education, for both Church and State combined to exert such jealous surveillance over the religious opinions of teachers that the result was a "suspension of education until a new method of effort and thought should evolve a new system." The slow evolution of that new system is admirably described by the author in the latter part of the book. Passing over the gloom of the eighteenth century, due mainly to the indifference of the Church to its educational functions, three causes are mentioned as shaping the modern national system of elementary education, the Sunday Schools system, the movements of Bell and Lancaster, and Parliamentary effort. The last chapter of the book is devoted to this most interesting topic and we wish we could quote it entire. From the Factory Act of 1802 which may be called the first compulsory Education Act, the principle of compulsory elementary Education steadily advanced until its triumph in 1833. It was on the 17th August of this year that in a very empty House of Commons a vote of £ 20,000 was passed after a hot debate by 50 votes to 26. It was granted in aid of private subscriptions for the erection of school houses for the education of the children of the poorer classes in Great Britain." It is an interesting circumstance that Joseph Hume and William Cobbett voted against the grant, the former, on the ground of its insufficiency, the latter for the reason that education was not improving the country. Mr. Cobbett was an advanced reformer in his time, and it is surprising to see him among the opponents of popular education. But the workings of the human mind are strange.

HISTORY OF INDIA FOR HIGH SCHOOLS BY O. F. DE LA FOSSE, M.A. (Messrs. Macmillan & Co., Rs. 1-8). This interesting history is intended primarily for students and we hope that it may prove useful also to a wider class of readers. One chief feature of this book is that the Hindu Period has been dealt with at greater length than in other histories. Another useful feature is the chronological order of events which has been followed throughout. The style and language in which the book is written make it a welcome addition to the already existing histories of India.

PEN PORTRAITS OF THE BRITISH SOLDIER

by the Rev. E. J. Hardy, M.A., Chaplain to H. M. Forces. (T. Fisher Unwin.)

This little book consists of a series of eight sketches depicting the soldier's life in its various phases in the present day.

"Tommy" is first shown as the recruit, then, in his every-day barrack life, and later on he is described in the field, at play, in love and as a time-expired man. Chapters are also devoted to various samples of soldiers, and to the "ha-porth o' bronze," (i.e.,) the Victoria Cross.

It is doubtful whether the book is in parts a true drawing of our soldiers. Mr. Hardy makes the same mistake as many a good officer. He thinks that the side of his character which a soldier shows to his chaplain must of necessity be the true one. In most cases this is far from being so, be the officer in question, Colonel, Captain, Subaltern or Padre, and to know exactly the ins-and-outs of our soldiers' lives it is necessary to have lived with them *as one of themselves*. The "recruit" is fairly correctly drawn by the author, but Mr. Hardy shows a lamentable ignorance of the possibilities of soldiering when he suggests that a soldier might be allowed to live anywhere he likes, and can afford, so long as he turns up for his duties, and might "pay a substitute for coal-carrying fatigue." Coal-carrying is not also only fatigue in the army, and few British soldiers stay long in England after enlistment now-a-days. Suppose the paid substitute did not turn up too. The unfortunate non-commissioned officer in charge of the party would have to first ascertain from the young "swell" who his substitute was, and then go in chase of him. And even then he could not be punished. Dozens of reasons might be alleged against the possibility of the "private lodgings soldier" but want of space forbids, and it may be sufficient to draw attention to the question of control at night, the facilities afforded for desertion and the invidious distinction which such a privilege would undoubtedly cause, although Mr. Hardy seems to think it would prevent them. And moreover the "lodging principle" would be quite impossible abroad. The book refers almost exclusively to home soldiering, with a slight sprinkling of the Soudan and a collection of anecdotes of the South African War and the gaining of the Victoria Cross. These anecdotes are mostly good and well-told but labour under the disadvantage of having in many instances appeared in the newspapers and other publications. Not a word is said

of India, that great empire which is the home of so many thousands of our men for years, and without this the book cannot be considered a complete exposition of the British Soldier's life. Mr. Hardy is perhaps happiest in his last two sketches—time-expired men and Tommy in love. With regard to the army reserve he is correct and forcible, telling the truth from all points of view, and his description of the love-lorn soldier, whilst showing flashes of humour at times is as a whole a sympathetic and feeling sketch, containing a few sad facts and much good advice. The book is pleasantly written and readable, but every word in it will not be received as gospel truth by those who have been through the mill. The "pen and ink" illustrations Mr. by A. C. Gould which accompany each sketch are clever.

COMMERCE AND CHRISTIANITY, *by the Author of "Life in our Villages" &c. (Swan Sonnenschein & Co., Ltd., London, 1902.)*

The second edition of a book which has won no little attention among thoughtful religious people in the West, this book is not without its interest for India. At a time when India is setting out upon the path of competitive industry, it is well that its people should consider such teaching as that given here. The sum of that teaching is that competition is doomed. It is contrary to the laws of the Kingdom of God, and the growth of that Kingdom is fatal to it. Even Christians are slow to see this and the Churches in general, so the author asserts, are rather clinging to the competitive system than helping to supplant it. But, whatever the Churches do, the principles of God's Kingdom make their way. Great economic laws serve its ends, and the growth of Trusts, abolishing competition as they do, is a step towards that brotherly co-operation which is the social system laid down by Christ. Incidentally the author makes short work of the theory that Christ taught a bare asceticism. There is nothing to show that He was opposed to a developing complexity of civilisation. While men's characters were to be simple, their life might be complex, rich and full. The birds of the heaven with their plumage and their song, the lilies of the field robed in a glory greater than Solomon's are the illustrations Christ uses of the life, simple in its trustfulness, yet rich in its adornment and attributes, that Christ sets before His disciples.

F. W. K.

Topics from Periodicals.

EASTERN AND WESTERN CIVILISATION.

Prof. J. Nelson Fraser of the Deccan College, Poona, contributes to the latest number of *East and West* a short paper entitled "A Contrast." Prof. Fraser thinks that to a Western mind the idea of comparing Western and Eastern civilisation does not occur at all. He says "I do not think, in the first place, that it often occurs to a European to make the comparison at all. Western civilisation we feel to be a creation of mankind: Hindu civilisation is the work of a single people. It is, therefore, to begin with, difficult to take the comparison seriously. However, let us attempt it and see what it leads to."

Western civilisation is not, as is sometimes said, "an affair of yesterday"; it began, one may say, four thousand years ago. We are thinking, of course, not of the "ancient Britons," but of the Jews. In no sense a Western people, they supply, nevertheless, what is historically the oldest and in some ways the most important foundation of our spiritual life. Chronologically, however, their influence follows that of the Greeks, or rather unites with it in the form of Christianity. After Greece, Rome; after Rome, Roman Christianity, the Mediæval Church. Contemporary with the latter, the Crusades, and the growth of Chivalry. Finally, the Renaissance and the Modern world.

These are the epochs, and the names of the chief nations and systems that have made Europe. What are the ideas that Europe has drawn from their various sources?"

To this question the Professor gives the answer.

From the Jews, an impulse towards Monotheism, so strong that it has swept away the natural tendency of all European people towards Polytheism; moreover, a moral impulse, the lesson that God searches the hearts of men. From the Greeks we learned curiosity, the desire to know, whose fruits appear in their histories, in their science, their criticism, and their philosophy. With this curiosity went freedom, a power of shaking off the trammels of the past, which other races wear without even perceiving them. We learned, too, the love of beauty, and the conception of beauty as something more than a delight of the senses, as a form of order imposed on the natural wildness and luxuriance of the world. In the region of moral ideas, they have left much of which the value is not yet exhausted, but they have not directly moulded the character of Europe. The great moral impulse came from Rome. The Western world still feels, in every nation, the impulse of the Roman ideal; inflexible in peace and war; devoted to order and justice. With this is allied the stoic philosophy of conduct. The Greek and Roman ideals have this in common, that they contemplate the citizen as a public man, serving the State.

We pass on to the middle ages. We find in religion the growth of the ideal of austerity, so different from

that of the Greek. We find, too, the Church inheriting the work of Rome, imposing a community of sentiment on the varying nations of Europe. In the secular world we have chivalry which develops to its utmost the personality of man, insisting on personal devotion to a leader, personal devotion to a woman. Very different is the world of chivalry from the world of law; yet both systems grow throughout the middle ages side by side.

Then comes the Renaissance, which kindles again the sense of beauty, in painting, sculpture and poetry. Finally, the modern world achieves political stability (in which connection England has taught men most), and rises to the conception of Natural Law and its investigation.

These many influences are not dormant. Every Christian is taught the Bible, and at least every Sunday many thousands of more or less trained teachers are at work, expounding some form of Christianity. Greek philosophy is studied in every University in Europe; Roman law by every lawyer, Roman literature by every educated man. The ideas of chivalry permeate all our songs and poetry. Political responsibility is in England at any rate, a fact with which most men have been practically acquainted for centuries. Thus every educated man enters into the varied field of ideas which we have surveyed.

Now, then, does Hinduism compare with this? Shall I make the comparison or leave it to the Hindu? To me, says Prof. Fraser, at least, it appears superfluous. In art, in science, in law and politics, in that variety of human types on which the universal interest of literature depends, any sort of comparison seems needless. In philosophy and ethics a comparison may, of course, be made.

But what is the moral of this? Certainly not that any Western stranger cares to enjoy a triumph over the Hindu. As I have said, he does not want to compare the achievements of one race with those of mankind. But he does not want the Hindu to waste his time over the comparison either. He wants him to enter the community of races, to take his share in the inheritance. Moreover, he wants him to give what he has to give to the common stock; and there is, at any rate, one such thing, perhaps two. Hindu sages have said much to remind us that the life of the soul is more than riches; and we in the West sometime forget this. They have again expressed in the most forcible (though in a one-sided) manner the need for unity between man and God, and the dependence of all things on Him. There are signs that these ideas of Hinduism have attracted not only some charlatans, but some thoughtful people; and I believe their influence is destined to increase.

If so, history will only be repeating itself. The West has always shown itself willing to learn from the East. The Jews we have spoken of; Greek art began with hints from Assyria; Christianity probably assimilated theosophical elements, Buddhistic or other; Chivalry took something from the Arabs and Persians whom it met in the Crusades. There will be nothing surprising if the religious sense of the West again fortifies itself from springs of Eastern inspiration.

Professor Fraser gives a word of warning:—

Let Hindus however, not misunderstand this. If the West borrows from the East, it will not be to renounce those truths of her own which the East has yet to learn from her. Let Hinduism bear this well in mind, or she will be left, after all, with empty self-conceit instead of progress.

PERSISTENT ORIENTALISM.

The Rev. Protap Chunder Mozoomdar in the current issue of *East and West* brings together the chief elements of what he calls Persistent Orientalism. The first is "a brooding quietism that loves to retire from outside activities into the inner mind." Within proper limits the school master must carefully cultivate this introspective faculty, and for this purpose he must be himself an Oriental and not a mere product of the Government Normal Schools. The second is profound emotion, which in the sublime field of religion, takes the form of 'percipient ecstasy.' Though not in keeping with the genius of the Western, this trait of spiritual vision is peculiarly helpful where rigid reasoning and accurate thinking fail, where the known and the unknown meet. Emerson, the founder of the Transcendental School, comes nearest of all Westerns to this emotional insight. Even in his case, however, "it was the intellect that was the real organ of thought, intellect deeply tinged with emotion, rather than emotion as the original medium of spiritual intuitions." The third characteristic of the Eastern mind is its instinctive belief in monism, its abiding faith in the one, the Eternal. "Whether spiritualised in the Upanishads, or reasoned out in the Darshan, worked into the Mahabharata, or concentrated in the song of songs, the oneness of the spirit of all things, the vainness of the apparent world and worldly life, the supreme importance of perfect unity with the Eternal essence must ever remain as the singularity of the Oriental's nature." When such perfect unity with the eternal essence is attained, there is no doubt absolute selflessness, but not self-annihilation. There is no morality then, but divinity. In Christian theology, Christ and St. Paul are said to have attained this supreme moral ecstasy; but to the Eastern mind, this condition is the inalienable birthright of every individual. If earnestly pursued, this ceaseless hankering after spiritual perfection must correct the intellectual superficiality, the besetting materialism of the West.

In the interaction of the East and the West then, Orientalism has a message. But if that message is to be performed, it must shake off the moral heaviness of age and indifference.

"How can it be, if we ourselves have not risen to the height of the genius of our Continent? How can it be if we are content to feed upon the husks of a superficial philosophy and outworn breeds swept out of the tables of the West? How can it be when all our credentials to the world's acceptance lie in a mere boast of what our forefathers achieved? A parrot-like recitation of Sanskrit phrases and exploded theories, a slavish adherence to usages and ideas out of which all moral vitality has fled, is not the representation of the Eastern spirit. Their quaint antiquity is all the recommendation they now have for the fashionable fanciful men and women of our days. Be it with or without the help of Europe, Orientals must regain the original genius for insight, emotion, spiritual reason and ethical self-surrender. This alone can unseal that inspiration from the Eternal which made Asia the fountain of all true faith and all true thought.

I stood on the Himalayas, one evening, to watch the glory of an autumn sunset behind the great snow-peaks on the West. After a gleam or two a sudden mist arose. It swallowed the snows, covered the crests, hid all the great mountains, obscured every view, and encompassed even myself. In great disappointment I turned round, when, lo! the whole splendour of the West reappeared in the cloudlands of the East. The transferred lights and glories were unspeakable. I stood transfixed, and reflected that such must happen some day in the spiritual heavens—when the mists have swallowed the West the Eternal Light shall be restored to the Eastern sky. From the East to the West, and then from the West to the East again, will the Sun move round to complete its mystic cycle."

ORIGIN OF AMERICAN POLYGAMY.

It is well known that the Mormonites are chiefly disliked for the practice of polygamy. Recently their President proclaimed that the practice is not included among their doctrines. A son of the prophet Joseph Smith writes in the *Arena* vindicating his father from the charge of having preached and practised polygamy. In the Book of Mormon which is the Revelation of this sect, the practice is expressly condemned. It was not until August 29, 1852, that this change in regard to the domestic relation was made. It was first introduced by President Brigham Young, who succeeded Joseph Smith, and who alleged that a revelation ordaining polygamy had been received by his predecessor, and that he had kept a copy of this document under lock and key in his private possession, the original having been burned by Emma, wife of Joseph Smith. These allegations are denied by the son. He further avers that the claims of certain Utah women to be wives of the prophet have been repeatedly examined and proved to be false. His father had only one wife, and no children of his by any other wife have ever been produced.

CATTLE BREEDING ASSOCIATIONS IN GERMANY.

A writer in the August Number of *The Agricultural Economist* furnishes some interesting account, of cattle breeding associations in Germany and with reference to cattle-show by these associations observes:—

"During a visit I paid lately to the German Agricultural Society's Annual show, in Mannheim, I was struck by the great number of cattle exhibited by breeding associations. In fact, out of the total 695 heads of cattle on show, 461 or about two-thirds had been sent in the name of those breeding societies."

Here is an account of one of the most important of breeding associations in Germany "Association of the Oberbadish Breeding Societies."

"This association was founded in 1887, and includes ten local societies under its management. Its working area is, in South Baden, some 1330 square miles, and the number of cattle attended to is over 149,000. Briefly, the aims of the Association can be summarized as follows:—They undertake the regulation of the cattle market and facilitate the selling of breeding animals by means of shows inside their own area and of participation in shows outside. They lead and supervise stock-breeding according to the rules laid down by the societies. In fact, they represent and centralize the direction of the affiliated members, whose local societies are self managed.

"But the most interesting feature, from the individual farmer's point of view, is the action taken in order to improve cattle breeding. That is the business of the local committee, which is composed of the veterinary officer as chairman, with the Obmann (president) and one member from each society, and whose work applies over the whole society's area. They receive the animals they judge good for breeding and enter them into their herd-book. Each one when so accepted, is marked and numbered on the left ear. The calves are taken in immediately after birth, but the animals are finally registered and the ears marked only when they are three months old. Twice a year, in April, May and August, September, the committee has to register the calves and revise the register, removing therefrom the animals that they judge too old or not adapted for breeding purposes. And last, but not least, the local committee must choose the bulls which they will employ. In Baden, the use of bulls in community is submitted to state inspection, and only approved stock can be employed. Choice is of course made according to the association's best leading principles. After being entered into a special herd-book, the bulls are marked on the ear, after which they may be used by the association. Indeed, the mark on the left ear is, in South Baden, a certain sign of purity of breed and the progressive farmers will use none not so marked."

It is an easy and sure means of control, and one can understand how such a system must lead to rapid progress. The Badish farmers are said to be small peasants; and in Baden hardly 1·8 per cent. of the farms exceed 250 acres, and more than four fifths are under fifty. To make farming a success, they had to apply the principles of co-operation and with their association as a guide they had greater chances of success, and could do more in the way of expenditure in all directions, since

they were pretty sure not to waste the resources of the association.

It is said that the young animals of to-day are much better taken care of than before, and that large pasturage has been created and devoted to stock raising. As regards trade also, the market seems to be very extensive, since they sell their breeding animals direct, thus dispensing with the middleman, and securing the profits which would otherwise go into his pocket.

THE CITIZEN'S DEBT TO HIS COUNTRY.

The Hon. Mr. Boyd Winchester enters in the *Arena* a vigorous protest against the retirement from public life of some of the most honourable men of the day. The reason generally given for such retirement is that public life is becoming degraded and corrupted owing to the dominance of selfish and adventurous men. This makes it the more necessary for the purer persons to assert themselves in all general movements. On the contrary, although the suffrage has been widely extended, the sense of duty is not yet sufficiently common. In nearly every election, National, State, and Municipal, a large number of qualified voters abstain from voting. "Great events, pregnant with consequences of the highest import, are permitted to be carried by minorities. It is the well-to-do, the industrious mechanic, the laborious farmer, the man of study, the merchant, the professional man,—in short, the moral and religious and educational classes, those who form the sinew and substance of the State—that neglect or refuse to discharge their duties as American citizens." Too many of these think with Cato that "when vice prevails and impious men bear sway, the post of honour is a private station." On the contrary the post of honour is always the post of duty.

"Free government must fail if those best fitted to direct it refuse to do their part, contribute nothing but fault-finding and denunciation toward the correction of the evils they decry, and leave the actual work to be done by the ignorant and base."

As Edmund Burke said:

"He violates the law of duty who sleeps at his post equally with him who goes over to the enemy." If there are evils in political life, the people have nothing but their own civic apathy to blame. The failure to exercise the electoral power in the interest of good government is responsible for them. Let people remember the three fundamental conditions laid down by John Stuart Mill for the success of a republican government.

"The first is that the people for whom it is intended shall be willing to receive it. The second is that they shall be willing and able to do what is necessary to keep it standing. The third is that they shall be willing and able to fulfil the duties and discharge the functions it requires of them, to enable it to fulfil its purposes."

THE HIGHER LEARNING IN INDIA AND THE TATA SCHEME.

Major Grant contributes a rousing article on the above subject to the latest number of *East and West*. He laments the narrow scope of the *Indian Institute of Science* as finally decided, and pleads for a liberal Imperial grant towards the Tata foundation sufficient to convert it into a large University for higher Scientific training. He attributes the narrowing of the scope by Prof. Ramsay to a belief that only £10,000 would be available for such a purpose. Major Grant thinks that the country is ripe for the larger scheme and that the necessary funds can be found, if only the movement be taken up by men who have faith and confidence in it.

"For American trusts and combines one may have little respect, but at least one can admire the wonderful grasp of the factors of commerce and finance, the resource and dash of the men who bring them into being. They, indeed, can be said to seize their opportunities, and to apprehend the possibilities of any given case. Cannot we in India apply something of the same faith and daring in a better cause; cannot we rise above the cheap condemnation of a scheme, largely conceived and most generously endowed, as being "Utopian"? So far from its being Utopian, I am persuaded that we might in a few years possess a head quarters of learning in India, which would compel the homage of the truly learned in all countries. Granted that such an idea is still a dream it is at least a dream worthy of respect and which, given the enthusiasm and encouragement it rightly deserves, could be translated into a reality. For it is idle to say, even by implication, that a man like the dreamer of that dream does not appreciate the difficulties to be overcome, or that he is unwilling to back his opinion: his life and his gift alike give the lie to such assertions. We do not want the "dry light" of criticism, or only secondarily so: what is required in the first instance, and afterwards, is the glow of enthusiasm, the hearty response to a noble ideal.

"Thirty lakhs, or twice thirty lakhs, would appear none too liberal a contribution from the Indian Empire for the attainment of such a consummation, did those concerned apprehend the vastness of the issues at stake, issues immensely greater than the training of a few technical experts in the creation of one or two fresh industries."

Prof. Ramsay has sent a short note on the subject, which it would be useful to quote entire:

Major Grant has rightly expressed my views when he suggests that the recommendations in my report were made on the understanding that no very large annual income would be available for the Institute, at least at first. On general grounds, of course, to supply the needs of a population as large as that of Europe, Russia excluded, an Institute of learning and research in all branches of knowledge, such as was indicated by Major Grant in his original address, must recommend itself to every thinking man. But to establish an Institute on such lines as his would have required at least five or six times the income which, I was informed, was likely to be placed at the disposal of the Committee. The immediately practical question, therefore, arose:—In what way can the most pressing needs of India be best supplied? During my too short stay in India, I was impressed by two facts: first, that most of the population supports itself by agriculture, and that the relative proportion of manufacture to agriculture, in comparison with Europe or America, is insignificant; and, second, that the raw products of India, which, so far as I could ascertain, are very considerable in amount, have either not been exploited, or, like the Kolar gold-fields, are in the hands of English companies, or are exported in an unmanufactured state; in the last case, they leave the country without producing any equivalent in wealth, except in so far as the labour required to collect them and to transport them to a port of shipment may be regarded as productive. Impelled by these considerations, I recommended a scheme by means of which I hoped that industries dealing with raw products would be established in the country; granting the success of the attempt, an educated class of manufacturers would gradually be created, while, at the same time, employment would be given to a large army of persons who are at present directly dependent on the soil for their livelihood.

The creation of a comparatively wealthy class of men would, in the course of a generation or two, be followed by the springing into being of a leisured class interested in learning for its own sake. And it is my hope that, by the efforts of this leisured class, the Institute will become complete, and be developed on all sides.

Major Grant, whose experience of Indian conditions is incomparably greater than mine, holds the view that the country is ripe for the wider scheme. Far be it from me to gainsay him; but I still believe that if the income of the Institute is not very largely supplemented, a start can best be made on the lines laid down in my report to the Committee.

SECRET COMMISSIONS IN BUSINESS.

Anthony Pulbrook, Solicitor, Author of "Responsibilities of Directors" in the *Law Magazine and Review* enters a strong protest against the system of offering and accepting secret commissions in business transactions. Referring to the recipient of these secret commissions the writer remarks.

"A bold thief who robs you in open daylight carries some kind of respect for his proceedings; to get what he wants he boldly risks his liberty, but the canting hypocrites who, under pretence of being your friend, accept pay for assisting others in robbing you, should be treated as vermin and hunted from society. The law, too, should treat them, as it does the secret poisoner, as wholly unworthy of clemency."

The writer fully realizes the fact that it is useless to legislate against the recipients of the secret commission only. Says he

"If society will frown on the man who tempts by offering illicit commissions, and gather up its skirts to prevent contact with him, as being something outside its views of propriety, and legislature makes his secrecy a criminal offence, bribery and corruption in business pursuits will be stamped out equally as effectively as has been done in elections."

This vice appears to have overtaken not merely individual businessmen of a low type, but also those holding high positions, the banks, newspapers and big companies. And it has taken many forms too. But all the same the people of England are not disposed to move in the matter. The two Bills which were brought into Parliament by the Lord Chancellor and the Lord Chief Justice to make corrupt practices a criminal offence met with the fate of being numbered at the end of the session with the massacred innocents. This leads the writer to make some unsavoury remarks about the city morals and the Parliamentary morality.

"Votes rule the day, and to obtain these votes the moneyed interest must not be inconvenienced; and this is best effected by smothering home reforms and bringing foreign relations to the fore. No enemies are made thereby by which votes are lost."

But Mr. Anthony Pulbrook seems to have some confidences in his Peers. He says :—

If the House of Commons refuses to do its duty, then let our Peers, whose watchword is supposed to be honour, take the matter in hand as one of "honour." The law regards them as being so immaculate when their honour is at stake, that they are allowed to give their evidence in a Court of law, not on oath but on their honour If our Peers and county families were to "tuboo" in society the wealthy parvenu who has amassed gold by unscrupulous methods, or treats the man who takes a secret commission in the same manner as it would a man who is caught cheating at cards, a more healthy condition of business would result in the City.

THE HYMN OF CREATION.

RENDERED FROM A BENGALI SONG, COMPOSED BY
SWAMI VIVEKANANDA.

(From "The Prabudha Bharata.")

One mass,

Devoid of form, name and colour,
Timeless, devoid of past and future,
Spaceless, devoid of all,
Where rests hushed

Even speech of negation,†

Voiceless.

From thence,

Floweth the river causal,
In the form of desire radiant,
Its waters angrily roaring
The constant roar,

"I am," "I am."

In that ocean,

Of desire limitless,
Appear waves, countless, infinite,
Of what forms diverse,
Of what power manifold,
Of what repose,
Of what movements varied,

Who can tell?

Million moons, million suns,
Springing from that ocean,
Rushing with din tumultuous,
Covered the firmament,
Drowning the points of heaven,

In light effulgent.

In it

Live what beings,
Dull and quick, unnumbered,
Pleasure and pain,
Disease, birth and death !
The sun He is,
His the ray,
(Nay) the sun is He,
And He the ray.

† Neti, Neti," "not this not this," Brahman cannot be described in any other way.

THE PHILIPPINE POLICY—A LESSON FROM INDIA.

The leading article in *the Arena* for August is from the pen of Rev. Robert E. Bisbee and is a condemnation of the policy of the United States in the Philippines. Of the many reasons urged by the writer one is of peculiar interest to us in India. The English people, argues the writer, are eminently fitted to govern colonies and alien peoples. In tropical India, however, even England has failed, and how can the Americans succeed where Englishmen have failed? The writer relies for his knowledge of the State of India on Robert Ellis Thompson's "The Hand of God in American History", from which he quotes the following extract.

"We are sometimes invited to contemplate what England has done for India as a sample of what a great country can effect for the welfare of a dependency. England has introduced into India Western methods of administration and her own notions of justice and equality. She has put down Thuggee, Sutte, and public child-murder. She has constructed railroads and canals, at an enormous cost to the people. She has promoted secular education by Government Schools and Colleges, which have yielded an abundant crop of agnostics. But she has neither lifted the Hindu people to a higher level of thought nor secured the prosperity of the millions under her rule.

"As for the economic condition of India, it hardly could be worse, and it never was so bad under native rule of any kind. By the selfish destruction of the native manufacturers in the interest of those of Great Britain, at the opening of the last century, the greatest manufacturing country of the world was reduced to the level of a merely agricultural community, with the consequent certainty that every failure of the rains would leave the people of India face to face with famine. Under the reign of Victoria the famine victims have been numbered by tens of millions. The lowering of the diet of the people has resulted in universal splentis, chronic cholera, and the recurrent bubonic plague.

"A report made by the Government's Famine Commission in 1885 traced the recurrence of this dreadful calamity to the uniformity of employment in agriculture, but not a single step had been taken or proposed to make variety of employment possible to the masses. To do so would run counter to English interests, or would involve the abandonment of economic maxims which were devised for English conditions only.

"In reviewing the report of the Famine Commission in 'The Lahore Civil and Military Gazette,' an English writer, whom I take to have been Mr. Rudyard Kipling, pays America the compliment of suggesting that if India had been under our rule we should soon have found a way to overcome the industrial difficulty and put an end to the famines. The compliment is not deserved. We probably would have done even worse than England has done. She is as well situated for the successful Government of dependencies as any country of the world, and is as open to the considerations of humanity and responsibilities as any other. Her rule in India is the most favourable experiment that has been made in conducting an alien Government for the benefit of a subject people, and it breaks down by every test that can be applied. Except in establishing peace within the peninsula, and abolishing a few of the most flagrant abuses of the native religion, it has failed at every point."

EARTH POWER.

From time to time, says a writer in *Science Siftings* suggestions have been made that the interior of the earth be utilised for power purposes. At the present time the British Association for the Advancement of Science is engaged in making a series of measurements of underground temperatures. Theoretically, temperature increases with the depth of the earth 1 deg. for every 59ft. At this rate of progression the temperature of the earth a few miles beneath the surface must be well up in the 1,000 deg., yet it is not thought that the increase is constant. At the same time, there are sufficient grounds for believing that at a comparatively small depth a heat of sufficient intensity and quantity may be found to successfully produce enough steam for the operation of an immense plant. In argument for the practicability of this plan Professor Halleck has said:—

"Suppose two holes were bored directly into the earth 12,000 ft. deep and, say, 50 ft. apart. According to the measurements I made in a Pittsburg well, at the bottom there would be a temperature of more than 240 deg.—far above the boiling point of water. Now, if very heavy charges of dynamite or some other powerful explosive were to be lowered to the bottom of each hole and exploded simultaneously, and the process repeated many times, I believe the two holes might have a sufficient connection established. The rock would be cracked and fissured in all directions, as in deep oil wells when they are shot; and if only one avenue were opened between the holes it would be enough."

The idea would then be to pour water down one hole, which, circulating through the cracks and fissures of the earth to the other hole, would pass through it to the earth's surface, where its heat and pressure could be utilised.

There is at present at Pittsburg a very deep boring, which may have originally been intended for a gas well which proved unproductive of that material. It is the intention of the owners of that well to continue the hole as deep as possible until some demonstration of interior heat takes place, when, if the facts prove the supposition, Professor Halleck's plan is very likely to be put in operation and mankind will see one more natural force harnessed to its service.

The principal objection to such a plan would of course, be: first, the uncertainty of finding sufficient heat at the possible depth attainable in digging and boring holes, which would cost 10,000 dols. to the mile; second, the danger incidental to such an operation; and, third, the always present possibility that the interior heat at that particular point would fail in the same manner in which oil wells and gas wells run dry.

DEPARTMENTAL NOTES.

Educational.

A SPARTAN SCHOOL FOR BOYS.

A German Professor has opened a Spartan School for boys. His pupils wear loose flannel jackets without sleeves, tightened at the waist with a leather girdle, flannel trousers and sandals without socks. That is all. The food is the simplest possible—biscuits, lean meat and vegetables, and that in very moderate quantities. No boy allowed to be idle for a moment. If his studies are ended he must begin another sort of work, if it is only cleaning windows—a wholly admirable exercise, introduced by an educationalist of most practical mind. Absolute cleanliness is enforced. The boys are constantly washing, swimming, and scrubbing their spare bodies or scouring their scanty clothes. In summer the boys rise at half-past four, in winter at six. The greater part of their time they spend in the open air, and most of their lessons are prepared out of doors. The lads are encouraged to bear pain of all sorts, although gross cruelty is forbidden.

THE EDUCATION OF CHILDREN.

Recent investigations, made by educational and scientific experts in Germany, as regards the order of development of the brain in children go to show that those parts which serve the purpose of systematic thought, commonly known as the reasoning powers, are the last to mature. They also show that mental exhaustion from overwork is most serious and most frequent among pupils under 12 years of age. It has been found clearly that nothing exhausts children so much as prolonged mental exertion combined with strict attention. Thirty minutes is the utmost limit of time during which the close attention of a child to one subject should be demanded. An interval of from five to fifteen minutes after every lesson freshens up the little student greatly. As to how this interval should be employed, some recommend light physical exercise, others advocate rest. Probably some children would benefit more by the other. Morning hours are also generally recommended for study and the afternoon for handicrafts, etc. The result of all these elaborate investigations is graphically summed up in the old, old proverb "All work and no play makes Jack a dull boy."

SCIENCE AND CLASSICS.

Need a scientific man learn the classics? That depends. To become a doctor, yes, more or less. To be a geologist, zoologist, botanist, chemist, mineralogist, the student must know the etymologies of

scientific names; at any rate, that is the easiest way to get at their meanings. Besides, one never knows in these days that the simplest words may not be displaced by some new-fangled vocables with Greek or Latin roots. In that abstrusely scientific production, "Biometrika," two learned writers have discovered, among other wondrous things, a tendency to "brachy-bioty." It would never do not to know that this erudite term is simply shortness of life. "Technical terms are the lights of science and the shades of religion," said John Foster. We are getting doubtful of that dictum. If it be better to describe the long-skulled races as dolicocephalic, for the sake of international generality, it is as well to be plain when we can. Balfour Stewart wrote of "intrinsic luminosity," Tyndall called the same thing "real brightness"; we prefer Tyndall.

REVISION OF THE EDUCATIONAL RULES.

On the 27th June last the Hon. Mr. G. H. Stuart, M.A., Director of Public Instruction, brought to the notice of Government that under the existing provisions of the Madras Educational Rules a newly started school had to be recognised, if it satisfied the bare conditions of recognition specified in Chapter II even though the educational needs of the locality do not require it. Mr. Stuart pointed out that in bringing a recognised school on the Aided list the necessity for its existence in the locality was taken into account, but that this was not considered when a school merely sought recognition. It seemed very necessary that no school should be recognised unless it could make out a clear case for its existence and show that there was room for it. Such a condition would operate as a safeguard against the starting of adventure schools in places where the necessary means of education were already fully supplied. The recognition of schools of this kind which attracted pupils to themselves by low fees, laxity in discipline and leniency in promotion, and thus established themselves at the expense of long standing efficient institutions was manifestly undesirable, but there was nothing to prevent their obtaining recognition if they satisfied the conditions. With a view to remedy this defect the Director of Public Instruction suggested that it be made a condition of recognition of a new school or form or class that it was really needed in the locality.

Government has approved of the suggestion and has directed that a notification on the subject be published in the *Fort St. George Gazette*. The Director has also been requested to issue a revised edition of the rules numbering them continuously as in the Grant-in-Aid Code.

Literary.

MRS. CRAIGIE ON GEORGE ELIOT.

Mrs. Craigie ("John Oliver Hobbes"), in the article on George Eliot contributed to the *Encyclopædia Britannica* touches upon the novelist's relations with George Henry Lewes in the following terms: Among the many criticisms passed upon this step (in view of the fact, among other considerations, that Lewes had a wife living at the time,) no one has denied her courage in defying the law or questioned the quality of her tact in a singularly false position. That she felt the deepest affection for Mr. Lewes is evident; that we owe the development of her genius to his influence and constant sympathy is all but certain. Yet it is also sure that what she gained from his intimate companionship was heavily paid for in the unceasing consciousness that most people thought her guilty of a grave mistake, and found her written words, with their endorsement of traditional morality, wholly at variance with the circumstances of her private life. Doubts of her suffering in this respect will be at once dismissed after a study of her journal and letters. Stilted and unnatural as these are to a tragic degree, one can read well enough between the lines, and also in the elaborate dedication of each manuscript to "my husband" (in terms of the strongest love), that self-repression, coupled with audacity, does not make for peace. Her sensitiveness to criticism was extreme; a flippant paragraph or an illiterate review with regard to her work actually affected her for days. The whole history of her union with Lewes is a complete illustration of the force of sheer will—in that case partly her own and not considerably his—over a nature essentially unfitted for a bold stand against attacks."

THE NATIVE PRESS OF INDIA.

It is gratifying to note that at the Annual Conference of the Institute of Journalists, to be held at Birmingham from August 30th to September 5th, a paper on "The Native Press of India" is to be contributed by Mr. K. N. Kabraji. Any thing that serves to bring India to the fore in the eyes of the British public and to clear up the ground should be welcome. The Native Press of India as a hot bed of rank sedition is one of the nightmares of the ignorant British public and Mr. Kabraji's paper should be able to dispel the illusion.

LORD ACTON'S LECTURES.

The lectures delivered by the late Lord Acton as Regius Professor of Modern History at Cambridge have

been arranged for publication by his son, and will be issued by Messrs. Macmillan. Lord Acton delivered two courses—one on the French Revolution and the other on the General History of Modern Times. They are to appear in two volumes, with Lord Acton's inaugural lecture. It is hoped that a volume or two of his essays may be issued at a later date. The forthcoming volumes have been edited by Mr. R. Vere Laurence, Fellow of Trinity College, Cambridge.

A STUDY OF THE ENGLISH NATION.

Mr. Fisher Unwin has in the press a translation of M. Emile Boutmy's "*Essai d'une Psychologie Politique du Peuple Anglais au XIXe Siecle*"—a study of the English nation of the present day in its political, social, and moral aspects, and of the causes that have led to the formation of the British character.

LITERARY ITEMS.

The first volume of "The Cambridge Modern History" will appear on November 1, the last—the twelfth—six years hence. The general scheme of the work was drawn up by the late Prof. Lord Acton, and the editors are Dr. Ward, Dr. Prothero, and Mr. Stanley Leathes. The first volume, which is to treat of the Renaissance, will contain, as preface, a general statement of the plan and scope of the entire work. "By a universal modern history," say the editors, "we mean something distinct from the combined history of all countries; in other words, we mean a narrative which is not a mere string of episodes, but displays a continuous development. It moves in a succession to which the nations are subsidiary." For each of the twelve volumes of the History some historical fact of signal importance has been chosen as the central idea "round which individual developments are grouped, not accidentally but of reasoned purpose."

THE RIGHT KIND OF READING FOR CHILDREN.

Cultivate the right taste in the children and they will delight in the right kind of reading. With this in view give the younger ones such books as Emily Poulsson's "In the Child's World," Hans Christian Andersen's "Fairy Tales," Weed's "Stories of Insect Life," "Stories of the Flower People," "Story of Patsy," by Kate Douglas Wiggin, books by Mary Mapes Dodge and by Susan Coolidge, Ruskin's "King of the Golden River," Mary E. Burt's "Stories from Plato and Other Classics," Hamilton Gibbon's "Sharp Eyes," "Animals I Have known," by B. S. Thompson (both most charming Nature books), and "In and Out of the Nursery," by Eva E. Rowland.

Legal.

THE BOMBAY HIGH COURT MOOT.

The establishment of the Bombay High Court Moot, under the presidency of our learned Chief Justice, is a practical proof, if one were wanting, of the interest Sir Lawrence Jenkins evinces in the welfare of the Junior Bar, and particularly of young native barristers. The native junior at the Bar—for the European junior some how manages to prosper—has to struggle hard in his profession before he can secure even a footing. The early years of his professional career are beset with difficulties which but few manage to surmount, and, even when these are overcome, disappointment follows in the wake to embitter the life of our junior barrister. Full of hope and energy, he soon finds on his return that the training at the Temple or the Inn is of little use to him unless he assiduously pursues the study of the law and gains some practical experience at the Bar. It is not every native barrister who can afford to read in chambers in England, and even those who get the benefit of such training do not seem to be very much the better for it. Weary waiting fills the aspirant with disgust and despair, and the longer he has to wait the greater is his disappointment. The Chief Justice has not failed to notice the struggle of the native junior. He knows all his difficulties and appreciates the efforts he makes to surmount them. For, as he himself observed at the preliminary meeting of the Society, he had similar difficulties to overcome after his call to the Bar. Sir Lawrence Jenkins has long been pondering over the prospects of young native barristers and trying to find out the best way to give them a helping hand in their struggle. After much thought and after consulting some of the barristers themselves, he has organized a Moot, somewhat like the Debating Society at Gray's Inn, and it augurs well for the success of the Society that nearly the whole of the native section of the Bombay Bar has joined it. As the Chief Justice explained in an admirable and extremely sympathetic speech, the Moot is chiefly meant to give the native barrister that confidence and practical training which English barristers lay by for their future early in their career but which the former lacked in a conspicuous degree. Legal problems will be set by our learned Judges once every fortnight and these will be discussed at the meeting of the Moot by some native barristers. This discussion is confined to the juniors only, though senior barristers, native

and European, are cordially invited. Their presence will be an encouragement to the young men participating in the debate, and we hope they will attend the meetings more frequently and in larger numbers. The first legal problem set at the Moot was ably discussed by four native barristers, and the Chief Justice was well pleased with the discussion. While delivering judgment, so to say, he made some observations on the art of pleading, from which the young barristers must have learnt almost as much as from the discussion of the problem. Let not the native junior ruefully shake his head and ask, "What is the practical good to be derived from the Moot?" These meetings cannot possibly do him any harm: they are sure to do him some good. There may not be any immediate prospect of his profiting by the training he receives at the Moot; but it is founded mainly for the purpose of laying the foundation of the future career of the native junior. It is in his interest, therefore, to help this organization the best he can. Our native junior cannot be too grateful to Sir Lawrence Jenkins for establishing the Moot and for the practical and sympathetic interest he shows in his welfare.—*Voice of India.*

INHERITANCE IN SIAM.

In the preamble of the new Law of Inheritance Amendment Act, it is stated that some sections of that law are opposed to the spirit of the day. When judgment is given in accordance with sections, it is found that practical injustice is done, and hence the necessity of the amending Act. One old rule was that relatives who did not attend his deceased in his illness, or did not attend his cremation, had thereby broken their relationship and could not inherit anything. This is now expressly abolished. The new Act sets forth at length the rights of the relatives of a deceased person in regard to his property. If he leaves children they alone inherit; if any of the children be dead their children will receive the share of their parents, and so long as there are direct descendants other relatives of the deceased can have no claim. In case of there being no direct descendants the estate goes to the deceased's brothers and sisters or their children. If he leaves no children, and no brothers or sisters, the estate is divided between his widow and his parents. On these failing half brothers and sisters have a claim, and so on with other relatives. Four sections are also devoted to the disposition of the estate of a married woman deceased.

Bangkok Times.

Trade and Industry.

MANGO.

In speaking of such fruits as the Mango it may be said that although decidedly tropical, it does not require a high temperature whilst resting.

The Mango, *Mangifera indica*, is an Indian fruit, and is termed queen of tropical fruits; famed in mythology, and almost worshipped by the natives in years past.

In its native habitat the tree reaches great altitudes, but by rooting cuttings the tree is dwarfed enough for growing in a 12-in. or 15-in. pot, the tap-root being dispensed with.

The Mango will not bear transplanting from the ground, however. Sandy soil and plenty of water, and a tight fitting pot will cause the Mango to bear well.

A slight shade is beneficial in summer, but all sun possible during winter.

Nitrate of soda in minute doses together with soap-suds makes an excellent fertiliser.

The trees require careful training from the start, pinching being necessary when 1 ft. in height, and frequently afterwards to keep them down as much as possible.

Bush form is the best, and branches should be tied in position.

Blooms are produced in March, and unless bees are available they should be hand fertilised. Thinning out is necessary, but a 4-ft. tree will bear twenty-five to 100 fruits.

There are numerous varieties, some bearing fruits resembling turpentine in flavour, whilst others are so soft as to be eatable with a spoon.—“Cal.”

AN ENTERPRISING INDIAN IN AMERICA.

We are glad to hear that Mr. Veerasawmy Mudalljar who some 30 years ago emigrated from Madras is now the leading exeloirer of the diamond fields in British Guiana. He left Madras while yet in his teens and after serving for nearly 20 years as the Hindustani and Tamil Interpreter of the Colony, he retired on a well earned pension. Being a very enterprising man, he started a diamond industry which has now turned out to be a boon to the colony and has now been placed on a firm footing by the floating of a company in England. The diamond fields are furnishing employment to a large number of East Indians who originally emigrated to work upon the sugar plantations. A dozen syndicates are already at work. But as ill-luck would have it, a new diamond mining Regulation is to be introduced there, the draft of which has been already published. According to the new rules the Government propose to charge an elaborate series of fees which none but capitalists will be in a position to pay.

The new Regulations are being severely criticized by all the leading newspapers of the place. Several public meetings have been held strongly condemning the Government scheme. We have carefully gone through the objections raised by those interested in the diamond industry and we are of opinion that the rules as they now stand are certainly hurtful to the welfare of the industry. We give below Mr. Veerasawmy's views on the matter. “Mr. Veerasawmy, addressing a meeting said: It is well known that I am one of the original promoters of the diamond industry in this colony. I am of opinion that the objectionable sections in the new draft diamond Regulations will hamper the future prospects of the diamond industry in the colony. At present the inhabitants of the colony require help; but this Ordinance, if passed, will prevent the humbler classes of the community from taking any part in the industry. I think every right-thinking man should give his attention and assistance to the obstacles presented by the new draft Regulations. It is rather too soon to frame the new law, the existing ordinance should be allowed to operate for sometime longer. I recommend a royalty of three per cent. per carat—thirty cents a carat—on all diamonds; for I believe that if the proposed regulations are allowed to be passed they will prevent men from exploring land in other parts of the colony.” We understand that a copy of the previous resolutions together with a copy of the proposed Regulations, amendments and suggestions have been laid before His Excellency the Governor and the Court of Policy and we hope in the interests of the industry which has not yet begun to pay its way, that the concessions asked for will be allowed.—*Cochin Argus*.

PACKING MATERIALS FOR COTTON BALES.

A despatch has been received at the Foreign Office, from H. M. Consul at Dakar, drawing attention to the following fact which is of importance to British exporters, especially of cotton goods.

A cargo, chiefly consisting of bales of cotton, was recently landed at Dakar considerably damaged by sea water. When the bales came to be opened for examination by the Board of Survey, it was found that two different materials had been employed by shippers for the inside packing of the bales, which gave very different results.

In one case the packing used was oiled canvas, in the other tarred canvas. With the first the contents of the bales were in every case badly damaged, whereas in the latter they were practically undamaged, although in several cases the outward appearance of the bales led one to expect that the contents would be irretrievably spoilt.

Medical.**APPLES FOR SLEEPLESSNESS.**

The apple is such a common fruit that very few persons are familiar with its remarkably efficacious medicinal properties. Everybody ought to know that the very best thing they can do is to eat apples just before retiring for the night. Persons uninitiated in the mysteries of the fruit are liable to throw up their hands in horror at the visions of dyspepsia which such a suggestion may summon up, but no harm can come even to a delicate system by the eating of ripe and juicy apples before going to bed. The apple is excellent brain food because it has more phosphoric acid in easily digested shape than any other fruits. It excites the action of the liver, promotes sound and healthy sleep and thoroughly disinfects the mouth. This is not all: the apple prevents indigestion and throat diseases.

BALLOONING AS A REMEDY FOR PULMONARY AFFECTIONS.

Balloonng is now receiving attention as a possible remedy for pulmonary affections. The conditions are not the same as those of mountaineering, the change of altitude being more rapid and muscular fatigue being absent. In the trips of the French Society of Physiology, Dr. Henocque proposes to regard the atmosphere as divided into three zones. Up to about three miles the surrounding air supplies all the oxygen needed, but ascends beyond five miles are held to require a closed car, as was first suggested in 1871, or an aerial diving suit.

DILATED STOMACH.

A dilated stomach is usually the result of a relaxation of the stomach and the system in general, and is usually brought on by over-eating. When we remember that the stomach is simply a hollow muscle, and that when muscles from lack of tone relax it gives rise to a considerable lassitude, we can very readily see that the stomach being a hollow muscle, such relaxation of the whole circumference of the stomach would admit of considerable dilatation; and when thus dilated its action is impaired, the secretions impaired, and a slow digestion must be expected. As to its cure, in few words, avoid taking large quantities of fluids, make the diet as nutritive and concentrated as possible, massage and rub the stomach, take electrical treatment, and exercise good care. With care, dilated, stomachs will in great measure recover.—*Health.*

WORK, AND LIVE LONG.

Health and longevity are indissolubly connected with work. Work furnishes the ozone for the lungs, the appetite and the digestion which support vigorous life; the

occupation which keeps the brain active and expansive. When a man of from 50 upwards retires, as he says, for rest, his intellectual powers become turbid, his circulation sluggish, his stomach a burden and the coffin his home. Bismarck, at 73, ruling Germany; Thiers at 80, France; Gladstone at 82, a power in England; illustrated the recuperative powers of hard work. Such men as these never cease to exercise to the full extent of their abilities their faculties in their chosen lines. This is the opinion of Mr. Chauncey Depew, who at the age of 68, has married a third charming young wife.

TO DISTINGUISH BETWEEN SMALL-POX AND CHICKEN-POX.

A writer in the "Lancet," referring to the prevalence of small-pox in London, and the difficulty sometimes in mild cases of differentiating between this disease and chicken-pox, calls attention to a well-known method by which this object can be attained. The vesicles in chicken-pox are unilocular, while in small-pox they are multilocular, the practical result of this pathological act being that, if a chicken-pox vesicle be pricked with a needle, its contents can be completely evacuated and the cell will collapse; whereas in small-pox, if you make twenty pricks with a needle, the vesicle will not collapse, because, being multilocular, it is impossible to empty it.

CURE FOR STAMMERING.

A Gentleman who stammered from childhood almost up to manhood gives a very simple remedy for the misfortune: "Go into a room where you will be quiet and alone, get some book that will interest but not excite you, and sit down and read two hours aloud, to yourself, keeping your teeth together. Do the same thing every two or three days or once a week, if tiresome, always taking care to read slowly and distinctly, moving the lips and not the teeth. Then conversing with others, try to speak as slowly and distinctly as possible, and making up your mind that you will not stammer.

"Well, I tried this remedy, not having much faith in it, I must confess, but willing to do almost anything to cure myself of such an annoying difficulty. I read for two hours, aloud, with my teeth together. The first result was to make my tongue and jaws ache—that is while I was reading; and the next, to make me feel as if something had loosened my talking apparatus, for I could speak with less difficulty immediately. The change was so great that every one who knew me remarked about it. I repeated the remedy every five or six days, for a month and then at longer intervals, till cured."

Science.

ELECTRIC TYPEWRITER.

A new form of typewriter was recently exhibited in London, and gives promise of wide application. In most typewriters much has to be sacrificed in construction to give lightness of touch, so that the strain upon the fingers of the operator shall be as little as possible. In the new typewriter, which is known as the 'Blick,' after its inventor, Mr. Blickensderfer, the slightest touch is sufficient to operate the keys, for the electric current, which can be borrowed from the nearest lamp, does the actual work after the necessary contact has been made. The stroke of the machine is thus independent of the worker, and each impression is of such strength that uniformity of spring is assured. No extra work is entailed in duplicating, the pressure entailing no additional demand upon the operator. Other valuable features are the automic carriage return and spacing facilities, which save much time.

PERIODICAL SCIENTIFIC DISCOVERIES.

A writer in the *Neues Wiener Journal* has been making researches, with the result that he has deduced that we are on the eve of an epoch-making discovery. His calculations are based on the fact that every recurring period of about 20 years during the last century was marked by a wonderful addition to science. Thus the steamship, first discovered in 1807, was followed by the Railway in 1829 then, in another 20 years, the system of telegraphy was made practical; again, 20 years and the dynamo machine was brought into existence; and after another lapse of the same period Hertz discovered electric rays.

ALLOYS OF ALUMINIUM AND MAGNESIUM.

Alloys of aluminium and magnesium are known to work better than pure aluminium with certain tools but they are less malleable and ductile. Some German metallurgists have discovered that the addition of 2 to 10 per cent. of magnesium scarcely changes the appearance of the aluminium, but that this alloy acquires new qualities after rolling several times at a temperature of 400deg. to 500deg. C. It can be cut and filed with the greatest facility, while it retains the ductility and malleability of pure aluminium.

THE LATE EFFECTS OF THE ROENTGEN RAYS.

It is evident that we are as yet far from having attained to completeness of knowledge in regard to the effects which may be produced by the Roentgen rays. That they may cause very unpleasant and slowly healing "burns" is now well-known, as also that these effects may not

show themselves for some time after the application. Again, it has been shown that in some cases, even when no ulceration is produced, considerable pigmentation may be set up, so that it may occasionally happen that in the attempt to get rid of a degree of hirsuteness which may be, comparatively speaking, not a matter of great consequence, an amount of pigmentation may be produced which may be most annoying and may last for a long time. Lately, however, another unfortunate result of the rays has come to light, namely, the development of disfiguring telangiectases on the area dealt with. These starlike dilatations of the blood vessels when they occur in any number may be very disfiguring, and there is this that is curious about them that in some cases a considerable time several months—seems to have elapsed before they showed themselves. There can be no doubt that the rays in passing through the tissues exercise a selective power, affecting certain tissues destructively (as is well shown in their action upon certain forms of cancer), and it may be presumed that in the cases mentioned the dilatation of the cutaneous blood vessels has either been due to interference with the circulation by a form of scar contraction following the partial destruction of certain tissues around the vessels, or may even have been due to the destructive effects of the rays upon the walls of the vessels themselves, leading to their gradual dilatation under the pressure of the blood. But, however they are caused, they serve well to show how careful one must be in the use of an agent the nature of which we do not as yet fully understand.

STREET CLEANSING.

A new form of sweeping machine is on its trial in the streets of New York. It consists of a large two-horsed cart, and behind it is a rotary sweeper operated by chains and sprockets. The rotary brush gathers up the dirt, which is carried by an endless belt furnished with scrapers into the cart above and dropped into a dustproof receptacle. The apparatus also includes a water-tank and attached sprinkler under the control of the driver, who sprinkles the road just in advance of the brush. The cart holds two cubic yards of dirt, it can be controlled by one man, and does its work without raising any dust in the air. If we compare this clean, convenient, and quick method of gathering up the refuse from the streets with the common plan of sweeping by hand and raising almost more dust than is carted away, its advantages are beyond dispute. We trust that some such plan be quickly adopted on this side of the Atlantic.

General.

THE ANARCHIST AND THE ATHEIST.

The anarchist, like the atheist, is first of all an egotist, due to a morbid brooding upon a single subject—his imagined self-importance. As the former resents the existence of authority, governmental or personal, even when constituted by the common consent of his fellows, so the latter repudiates the suggestion that there may exist anywhere in the universe a Being superior to himself. These apostles of "freedom" are themselves the veriest slaves—to a form of vanity that is only augmented in subtlety by scholastic education. As manifested in anarchism, it has an impelling force that leads its victim actually to court death at the hands of the public executioner as a means of gaining notoriety; while in atheism it varies from the desire to be considered "eccentric" to self-glorification, as in the case of the editor of an infidel weekly in Kentucky who prints his own portrait in every issue of his paper.—*Mind*

MARRIED BY PROXY.

One of the queerest features of Court life in Europe is the marriage by proxy of Royal personages. There are at the present moment no less than three Royal ladies who have been thus wedded—the Queen Regent of Spain, the Dowager Queen of Portugal, and the ex-Queen of Naples.

Kings and reigning Sovereigns are held to be too important personages to be married anywhere else than in their own dominions. On the other hand, it is held to be *infra dignitate* for a spinster princess of the blood, who is about to blossom forth into a full-fledged queen or empress, to travel abroad in quest of a consort.

In order to meet this difficulty the Royal or Imperial bridegroom delegates one of the principal nobles of the realm, who goes through the religious and civil portion of the wedding ceremony in the capital of the bride's country on behalf of his master, making the responses for him and tendering his hand, as well as the ring, at the prescribed points of the ceremony. He then accompanies her to his master's dominions, acting as her chief escort.

According to the ideas of the Roman Catholic Church, a ceremony of this kind is sufficiently binding upon the bride and upon the Royal bridegroom to render any further ceremony, ecclesiastical or civil, superfluous, and when any additional religious function takes place it

usually assumes the form of a "Te Deum," and a solemn benediction, attended by both husband and wife immediately on the arrival of the latter in the capital of her adopted country.

MEDICAL MURDERS.

A plea for some legal authority for physicians to shorten the lives of patients in certain cases is made occasionally, and sometimes by persons from whom it would not be expected. The newspapers have just been discussing a proposition of this kind which they report to have been advanced by a man who is widely known as professor of law and as a judge. With all due respect to the eminent person to whom such opinions are attributed, it must be said that any proposition of this sort tends toward degeneration and barbarism. No other element more surely indicates the grade which any people has reached in the rise of men from savagery to Christian civilization than does their recognition of the sacredness of human life. Any proposition whatever, no matter from whom it comes, which aims at legalizing, by painless methods or otherwise, the murder of the helpless by those in whose care they are, deserves swift, severe, and unsparing reprobation. The humanitarian purpose of the advocate of such a proposal may be conceded; but the just characterization of the infamous proposition should be none the less merciless.—*U. S. Exchange*.

INDIANS IN FOREIGN LANDS.

We think we may here avail ourselves of the present opportunity of drawing our readers' attention to the following figures compiled by Mr. Gandhi. They show that there is an India beyond the four corners of this country and that we cannot remain indifferent to the sufferings and disabilities of so many of our countrymen who, after resolving to face hardships and dangers abroad, bravely left their own homes for earning their bread in foreign lands:—

Country.	Non-Indians.	Indians.
Natal	... 50,000	50,000
Cape Colony	... 4,00,000	10,000
Transvaal	... ..	6,000
Mauritius	... 30,000	2,80,000
British Guiana*	... 93,000	1,27,424
Trinidad	... ..	30,000
Fiji	... 1,17,000	8,000
St. Vincent	... ..	2,000
Granada	... ..	1,000
St. Lucia	... ..	2,500
Jamaica	... ..	14,000
Dutch Guiana	... ..	5,000

French Guiana	...	...	40,000
Singapore	}	...	40,000
Penang		...	
Mallacca		...	
Zanzibar	...	...	20,000
Madagascar*	...	...	5,000
Portuguese Africa	...	...	10,000
German Africa*	...	...	1,000
Aden	...	...	10,000
Bourbon*	...	...	5,000

Total ... 6,66,924

WAR IN ANCIENT INDIA.

The following appears in the *Amrita Bazaar Patrika* :—
Is the world really progressing? The most civilised Powers of modern times held a conference for the purpose of humanising war. Let us see how such things were managed by the Hindus in India in days gone by. when the two rival armies assembled at Kurushkhetra, and representatives were appointed by both sides for the purpose of settling the rules under which the war was to be carried on.

(1). The first article was that the animosity must end with the war when the combatants must regard one another as friends, that is to say, the war was to be carried on without malice.

(2). The fight must be between equals, that is to say charioteer must fight with charioteer, Cavalry with Cavalry, Infantry with Infantry, etc.

(3). A man who is not strong enough to fight should be allowed to go scot free.

(4). None was to be struck without previous and distinct warning.

(5). A man who shows nervousness in war should not be interfered with.

(6). No one was to be taken a prisoner unawares on any account.

(7). No man, who had been deprived of his arms or armour or was badly armed, should be hurt.

(8). The persons of the following classes of people were to be considered sacred :—(a) The man who drives a chariot; (b) the bearer who carries a wounded man; (c) the surgeon; (d) the military bandsman.

(9). Two were not to attack one.

(10). No tricks, (ambushes, etc.), were to be allowed.

* The figures are only roughly correct.—*Gujarathi*.

SOME REMARKABLE PROPHECIES.

Wendell Phillips prophesied Marconi. On July 28, 1885, speaking in Music Hall to school-children, he said: "I expect, if I live forty years, to see a telegraph that will send messages without wire both ways at the same time." Marconi's performances do not quite realize that prediction, but they approach it—and the forty years will not have passed until the 28th of July 1905.

History records not a few of such Clairvoyant utterances. In 1789 Erasmus Darwin wrote a poem in which these two lines are found

"Soon shall thine arm unconquered steam, a far
Drive the slow barge and drag the rapid car."

This was eleven years before the first steamtug appeared on the Forth and Clyde Canal, and nearly a quarter of a century before the first locomotive was seen on rails. In one of Marlowe's plays, "Tamburline the Great," the Suez Canal was anticipated and described nearly three centuries in advance of its construction.

Patterson, the founder of the Bank of England, in a letter written almost at the close of the seventeenth century, predicted the control of the Isthmus of Darien by the people of this country and their acquisition of Cuba and Hawaii. Patterson's prophecy concluded as follows. "Stationed thus in the middle, on the east, and on the west sides of the New World, the English Americans will form the most potent and singular empire that has appeared, because it will consist not in the dominion of a part of the land of the globe, but in the dominion of the whole ocean."

This recalls a later prophecy of New York's great Senator Seward, who in 1856 declared that the last European power "will withdraw and disappear from this hemisphere within half a century." Since that date Russia, France, Spain, and Denmark have ceased to be American powers. Only great Britain remains, and the fulfilment of Seward's forecast is not due till 1906—*New York World*.

STUDIES IN SHAKESPEARE,

By the Hon. Rev. Dr. MILLER, O. I. E.

I. *Hamlet and the Waste of Life.*

II. *Macbeth and the Ruin of Souls.*

III. *King Lear and Indian Politics.*

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The Gaekwar on Compulsory Education.

The Gaekwar of Baroda makes a powerful plea in the *East and West* for September, for compulsory education in British India. No nation has any chance in the great world-competition unless it brings into the field all its available intellect in fully trained condition, for, as he says, "every additional ounce of brains may tell for an incalculable amount in the final apportionment of success and failure." His Highness recognises that compulsory education means free universal education, and that it would cost in India many times the money that Government at present expends on education. But he says the problem is urgent and must be faced. Where the additional money is to come from, in what ways retrenchments and economies may be effected for purposes of popular enlightenment, His Highness does not point out. It is easy to see how such a line is impossible for a ruler of a native state. But doubtless the idea is, that any sums spent on the noble scheme will be amply returned in the improved industrial and agricultural resources of the people, not to speak of the betterment of their lives from the hygienic, æsthetic, or moral standpoint. To show how little the British Government has done so far in this direction His Highness has given a table of comparative figures for different countries of the world in which India comes last, a great way behind the rest. The Gaekwar has established his right to advise the British Government on this point, for his own state has partially adopted the principle of compulsory education, and as Mr. J. S. Cotton, the compiler of the last quinquennial review on Indian Education, acknowledges, with conspicuous success.

Placed far above ordinary men by birth, wealth, and intellect, the Gaekwar has yet a love of the poor and anxiety for their elevation that are truly honourable. With a sense of natural justice not at all common among the aristocracy, he denounces the vanity of social distinctions, and sees in poverty

only an opportunity for benevolence and in ignorance only a call to duty. He calls upon the higher classes to prove their title to distinction by their desire to share their advantages with the less fortunate men around them. Two extracts are enough to show the generous ideal of the noble writer :—

" I have often attempted to impress on my people the hollowness and essential vulgarity of their sentiments of social rank and dignity, the so-called low-castes being only low by the accident of birth, and not by any personal lack of fitness or desirable qualifications. Their need of, and therefore their title to, State help is greater than that of their more fortunate brethren, for whom private as well as public munificence is ready to open its purse."

His Highness sincerely appreciates the love of learning that characterises the people of this land, both high and low, and points out what a great facility it offers to a scheme of compulsory education.

" Nothing has more struck and delighted me during all my tours and travels in India than the universal anxiety of the people to secure educational facilities for their children. Partly, perhaps, this arises from an idea of the immediate material advantages of education; but this is only a part of the truth. Nobody who knows our people can fail to become aware of the sincere respect in which they hold learning for its own sake. They do really set a sort of religious value upon it, and consider it as a precious possession; it is to them a safe, because hidden, investment, of which no age or sovereign can deprive them. I think if the Government had realised this, as it would if it kept its finger on the pulse of popular feeling, it would by this time have covered the land with schools for the people and carried out with heart and energy the principles we find it more than once enunciating in minutes, despatches and public utterances."

We must make one more remark before we part with the Gaekwar's article. In him, as in his illustrious friend and guru, the late Swami Vivekananda, a great pride in the past of our country is only a rousing summons to active exertion in the present. Contemplation of the Golden Age is no unmingled pleasure to him, as it is to so many, alas! of our so-called patriots, who seek in the glory of our ancestors complete justification for conservatism and inaction amidst the forward-compelling forces of the present time. Listen to a true disciple of the great Swami whom India can never cease to mourn :

" But let us not waste our time, as some of our countrymen do, priding ourselves on these doubtful and half-mythical glories. We shall do more wisely to take them as a measure of our present degradation. From what height fallen to what a depth thou seest !"

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THE INDIAN LAND QUESTION.

HERE is no country in the world where the land systems present a richer variety of forms than India. And there is no study which has a deeper interest for the Economist, or higher lessons for the Statesman, than the study of land systems.

English Economists have somewhat neglected the study of this question, and English Administrators have often blundered in India, because Englishmen are only familiar with their own system of landlords, and farmers, and of labourers who till and are paid by wages. In the Continent, the soil is, in a larger measure, the property of the nation, and continental economists like Sismondi and Lavelaye have made a deeper study of the land question. In India, with its varied land systems, the cultivator has had, from time immemorial, substantial customary rights to the soil he cultivates, and is not merely a labourer as in England. The land question has therefore received attention from the time of Manu downwards; and it may be said without exaggeration that the Occupancy Ryot of Bengal, the Peasant Proprietor of Madras and Bombay, and the cultivator-landlord of the Punjab, are born to the traditions of their respective land systems, and discuss the rights of the peasant, the landlord, and the State with an instinctive grasp of details which would puzzle the Cobden Club, or the Secretary of State for India.

Naturally enough, while we follow the lead of England in legislation relating to trade and tariffs, justice and general administration, we have more than once given the lead to England in land legislation. Pitt's Permanent Settlement of the land revenues of England was effected in 1798, *i. e.*, five years after the Bengal Permanent Settlement of 1793; and Gladstone's Irish Land Bill of 1869 was framed after that statesman had studied the

principles of the Lord Canning's Bengal Rent Act of 1859.*

The Land Question, therefore, is in itself an interesting and instructive study for the Economist and the Statesman, while at the same time it is of supreme importance as affecting the well-being of the people. In India, the question appears very complex at first sight but it is simple enough if we examine one by one the different systems of the different Provinces.

BENGAL.

Bengal had one distinctive land system; and the British Government have preserved that system. As this paper is meant to be descriptive rather than controversial, I do not wish to repeat here, what I have stated elsewhere, about the benefits conferred on the people of Bengal by the Permanent Settlement of 1793.

Nor do I wish to quote here opinions in favour of a Permanent Settlement of the land revenues in other parts of India, held and recorded by three generations of English statesmen and administrators, like Lord Cornwallis and Sir Thomas Munro, Lord William Bentinck and Lord Wellesley, Colebrooke, Lord Minto and Lord Hastings, Robert Merttins Bird, Colonel Baird and Lord Canning, Sir Charles Wood, Sir Stafford Northcote and Lord Lawrence. It is enough for my purpose here to state, what I have said repeatedly before, that the Permanent Settlement of Bengal has proved a blessing, not merely to landlords with whom it was concluded, but to all classes of the community. It has benefited all trades and professions by leaving more money in the country; promoted the well-being of various degrees of tenure-holders under the landlords; moderated the rents paid by actual cultivators; and prevented the worst effects of famines such as

* In the present generation, the Right Hon'ble Horace Plunkett has done more for the industries and agriculture of Ireland than any other living man. I had the pleasure of meeting him at the Glasgow Exhibition last year, and he interested himself greatly in the Indian land systems, so various, and so well suited to the life of an agricultural nation.

are witnessed to the present day in every other province of India.

Three years ago, I said, as President of the Lucknow Congress, that the Zemindars of Bengal did not generally get more than one-sixth of the produce of the soil from the actual cultivators as rent. The Secretary of State, Lord George Hamilton, thought it fit to contradict my statement in the House of Commons, and made the astounding remark, (which shows how incorrect official statements sometimes can be), that in "most parts" of Bengal, Zemindars levied half the produce of the soil as rent! I was staggered by this statement which I knew to be incorrect from my administrative experience of over 25 years; I made enquiries and traced the source of Lord George's error; but of the particulars of this enquiry, I am not free to make any mention. It is enough to state that I publicly denied the correctness of Lord George's statement both in the *Times* and in the *Manchester Guardian*, and I maintained that Bengal Zemindars did not generally receive more than one-fifth or one-sixth of the produce as rent. Later enquiries have confirmed my views, and even shew that I placed the figure too high by fixing on one-fifth or one-sixth. The Bengal Government's Report, which forms an enclosure to Lord Curzon's Land Revenue Resolution of the 16th January, 1902, gives the following figures showing proportion of rents to the produce of the soil in thirteen Districts of Bengal.

	Per cent.
24 Perganas	10
Nadiya	7
Midnapur	8
Hughly	14
Birbhoon	15
Backergunj	9
Noakhali	9
Tippura	9
Rajshahi	13
Gaya	14
Balasore	11
Muzaffarpur	16
Cuttack	14

And the Bengal Government proceed to state that "the figures in this table indicate with sufficient

clearness that rents in Bengal amount, on the average to little over 11 per cent. of the value of the gross produce of the land." The Bengal Government have, I think, done a public service by bringing out this fact clearly. It proves the extreme moderation of Bengal Zemindars, who receive, on the average, 11 per cent. of the produce of the soil as their rent, and not 16 or 20 per cent. as I had imagined before; and it establishes beyond controversy the fact that under a Permanent Settlement, the rental of the country is low, and that the great body of the agricultural population of the province are therefore comparatively prosperous and resourceful and safe from the worst effects of famines. The Government demand from the land, including cesses, amounts at the present time to about one-third of the rental or annual assets of landlords.

MADRAS.

Madras had three different Land Systems, and not one, in the eighteenth century.

(1) There were Village Communities in the Karnatic, holding the village lands in common, partitioning them among the villagers from time to time, and paying revenue to the State, like self-contained and self-governing little Republics.

(2) There were Zemindars in the Northern Circars, Polygars in the South, and Hill Rajas in the backward tracts, who were more than mere landlords, ruling their little estates like feudal chiefs and *de facto* rulers.

(3) There were Peasant-Proprietors who held and tilled their own soil, and paid revenue direct to the Government.

The British Government acted unwisely in ignoring the revenue functions of the Village Communities. There was a famous controversy between the Madras Board of Revenue and Sir Thomas Munro between 1818 and 1824 regarding these Village Communities. The Board rightly wished to keep up these ancient self-governing institutions and to make land-revenue collections through them, as had been done successfully for some years.

Sir Thomas Munro wrongly wished to ignore them for the purpose of land revenue collection, and to make settlements direct with cultivators. Sir Thomas Munro's opinion prevailed, and Village Communities as living bodies, ceased to exist, in spite of Munro's great anxiety to keep up the form.

There remained, therefore, two systems, the Zemindari System and the Ryotwari System, and these two systems exist in Madras down to the present day. The land revenue payable by Zemindars in the Northern Circars and some other places was permanently settled between 1801 and 1807; and settlements were made with the cultivators direct in other parts of Madras which were also intended to be permanent. Colonel Read and Sir Thomas Munro were the authors of the Ryotwari Settlement, and their recorded opinions about the permanency of this settlement leave no doubt in the matter. Read's Proclamation in Salem in 1796 is clear on this point; and Munro's evidence given before a Committee of the House of Commons is equally positive. We quote the statements he made on this occasion.

Q. "Have the goodness to explain to the Committee what you understand by the Ryotwari System."

A. "I shall state what I understand to be the principle of the Ryotwari System, the details will perhaps be too extensive. The principle of the Ryotwari System is to fix an assessment upon the whole land of the country. *This assessment is permanent; every Ryot who is likewise a cultivating proprietor of the land which he holds is permitted to hold that land at a fixed assessment as long as he pleases; he holds it for ever without any additional assessment.* If he occupies any waste or additional land, he pays the assessment that is fixed upon that land and no more; his rent undergoes no alteration."

Q. "Is the Committee to understand that in respect to permanency there is no difference between the Ryotwari System and the Bengal Permanent Settlement?"

A. "With respect to permanency there is no difference between the two systems. But the Ryotwari leaves the Government an increasing revenue arising from the waste in proportion to its cultivation." *

* The Italics are our own. In the face of this evidence the Madras Board of Revenue state in their Report, enclosed in Lord Curzon's Land Revenue Resolution of 1902, that "the words 'fixity' and 'permanency' as applied to the assessment did not, when used regarding the Ryotwari System, connote the idea of perpetual immutability." So distinguished an officer as the Hon'ble Mr. Nicholson would scarcely have made this mistake if he had consulted Sir Thomas Munro's evidence given before the House of Commons in 1813.

Sir Thomas Munro died in 1827, and for thirty years after that date the land revenue arrangements in Madras were in a hopeless muddle. The principle of a permanent assessment was recognized, but in practice the assessments in the different Districts were lowered, raised, and lowered again, according to the judgment of revenue officers. In spite of the reductions made by Sir Thomas Munro, these assessments continued ruinously high; the cultivators were ground down to the dust; and Madras continued to be the worst administered Province in the whole of India. Bengal flourished under its Permanent Settlement; Northern India obtained relief under Bird's great Settlement commenced in 1833; Bombay too obtained some relief under George Wingate's Settlement; but no large measures, no statesman-like policy, no comprehensive remedial acts relieved the Madras cultivators oppressed by a varying, uncertain, excessive revenue demand, which they never did and never could pay. Madras District officers wrote frequently on the wretched condition of the peasantry; officers employed in other Provinces condemned the Madras system in the strongest terms; and the Sudder Board of Revenue described, in their famous letter to the Governor-General, dated 20th March 1838, the wretched and oppressive system in Madras as contrasted with the state of things in Northern India. Wrote the Board, speaking of the Madras system:—

"Every man must be degraded in his own opinion and relegated to a state of perpetual pupillage. The honest, manly bearing of one accustomed to rely on his own exertions can never be his,—he can never show forth the erect and dignified independence of a man indifferent to the frown or favour of his superior, accustomed as he must be to prefer perpetual remonstrances and solicitations, and abide the result with the most enduring patience. His earnings, while his rent continues more than he can pay, are limited by the will of some meddling speculator; if they are brought to light, he must pay for his industry, if they are concealed they must pay for the collusion."

The wretched Land-Administration of Madras was revealed by witnesses, before the Parliamentary Committees which sat in 1848, and also during the Parliamentary enquiries of 1852 and 1853 before the renewal of the Company's Charter; and

John Bright scarcely exaggerated the evils of the Madras System when he spoke thus in 1858 in the House of Commons :

" You will find in many parts of India, especially in the Presidency of Madras, that the population consists entirely of the class of cultivators, and that the Government stands over them with a screw which is perpetually turned, leaving the handful of rice per day to the Ryot or the cultivator, and pouring all the rest of the produce of the soil into the Exchequer of the East India Company."

Such was the history of Madras during the first half of the nineteenth century. A survey and re-assessment of the Province was at last ordered by the Government Order No. 951, dated 14th August, 1855. The principle of a Permanent Settlement was not yet abandoned. The Madras Government in G. O. No. 241, dated 8th February still maintained that " one fundamental of the Ryotwari System is that the Government demand on the land is fixed for ever." And the Secretary of State in his well-known despatch of 1862, sanctioning the survey and re-assessment, accepted the principle of the eventual introduction of permanency in assessment. This was, however, the beginning of the end. The survey and settlement had the effect of equalizing the burdens on the cultivators in many places and making the assessment more equitable; but the assessment has been revised once every thirty years since that date and the principle of a Permanent Assessment, recognised and emphatically maintained during more than sixty years, has been abandoned.

The principle of a Permanent Settlement having been abandoned, it was necessary to provide some limits, intelligible to the cultivators, to the demand of the Government, some specific grounds for enhancements claimed by the Government at recurring settlements. This was provided by Lord Ripon in 1883. That sympathetic ruler made a proposal to the Government of Madras to eliminate from future settlements the elements of uncer-

tainty and inquisitorial enquiry, and to give to the Ryot an assurance of permanence and security without depriving the state " of the power of enhancement of the revenue on *defined conditions*." The Government of Madras agreed to this proposal, and in Government Order, No. 775, dated 13th August, 1883 accepted the principle that in Districts in which the revenue has been adequately assessed, i.e., which had been surveyed and settled, there should be no future enhancement of the Government demand except on the ground of a rise in prices.

Happy it were for Madras if even this modified Permanent Settlement had been the accepted law of the land. But Lord Ripon left India in 1884, and in January 1885 the Secretary of State virtually rejected the principle of " enhancement of the revenue on *defined conditions*." And in criticising certain other proposals made by Sir Alfred Lyall, the Secretary of State disapproved of " the dangerous policy of pledging the Government for ever to a particular line of action." The Secretary of State did not see, and the Indian Government has not understood since, that it is more dangerous not to give the cultivators of India some pledges against uncertain demands, some intelligible and specific grounds for enhancements, at recurring settlements. In the absence of such a pledge, the Madras cultivators, who pay the revenue direct to the state, suffer to this day from two of the greatest evils which can afflict agriculture in any country in the world,—*viz.*, over-assessment, and uncertainty in the state-demand. *

* I mentioned elsewhere that the Government of Madras were guided by two rules, *firstly*, that the State demand should not exceed one-half the net produce of fields after deducting cost of cultivation, and, *secondly*, that it should not exceed one-third the gross produce of the soil. The Hon'ble Mr. Nicholson says that I was wrong in supposing the existence of this second rule. In para 46 of his report which forms an enclosure to Lord Curzon's Land Revenue Resolution, Mr. Nicholson states :—

" Apparently Mr. Dutt refers to certain remarks in G. O. No. 951, dated 14th August 1855. * * But the Court of Directors in their reply dated 17th December 1856, declined to accept this rule of assessment, upon the gross, and in view of probable inequalities of the assessment, ordered that it should be a proportion of the nett. The matter was subsequently discussed with the

Landlords in Bengal and Northern India are prevented by law from enhancing rents except on "*definite conditions*" laid down by law; and the Peasant Proprietors of Madras thus lack that security which tenants of private landlords possess elsewhere. In a Memorial submitted to the Secretary of State in December 1900, some retired Indian Officials again suggested that enhancement of the Ryotwari land revenue should be made only on definite conditions. Lord Curzon has rejected this prayer. He has declined to give the Madras and Bombay Ryot the security which was given to the Bengal cultivators by Lord Canning in 1859, and has been extended to the other parts of Northern India by subsequent Tenancy Acts; he has not limited enhancement to any "*defined conditions*", such as were proclaimed by Lord Ripon in 1883 and were suggested in the Memorial of 1900; and he has left the peasantry of Southern India in that state of *uncertainty* which is ruinous to agricultural industry all over the world.

BOMBAY.

When the Deccan came under British Rule in 1817, there were two institutions, indigenous to the country, which were found to exist over most parts of the conquered territory. They were Village Communities, and Mirasi Tenures. Speaking of the former, Mountstuart Elphinstone wrote in 1819: "These Communities contain in miniature all the materials of a State within themselves, and are almost sufficient to protect their members if all other Governments are withdrawn." And speaking of the latter, he said: "A large portion of

the Ryots are the proprietors of their estates' subject to the payment of a fixed Land Tax; that their property is hereditary and saleable; and they are never dispossessed while they pay their tax." As elsewhere, these ancient and indigenous institutions of the land were swept away under British Rule.

After some unsuccessful endeavours to settle the country, a regular survey and settlement was commenced by George Wingate and Goldsmid in 1835. They ignored *Village Communities* and made settlements with each individual Ryot; and they ignored a *fixed Land Tax*, and imposed a tax on each field to be revised at the next settlement. Nevertheless as the settlement was made for thirty years, it gave some relief to the people; and the cultivators of Bombay were less harassed and less oppressed than the cultivators of Madras between 1836 and 1856. Wingate's settlement, commenced in 1836, was completed or nearly completed in 1872, and the Land Revenue was raised about thirty-two per cent. A second settlement commenced in 1866 once again raised the land revenue by thirty per cent; and a third settlement has been commenced in 1896.*

The weak point in the Bombay system is the same as in the Madras system; the conditions of enhancement at each recurring settlement have not been defined; the cultivator does not know on what grounds the State will claim an increase at the next settlement. The security which is given to the cultivator of Bengal and Northern India is denied to the cultivator of Madras and Bombay; the former knows, and can reckon beforehand on

Home Government, and in 1864 it was finally decided that the rule should be one half of the net produce."

It is curious that so careful and well-informed an officer as Mr. Nicholson should not know that the rule which, he said, was abolished in 1856 and 1864, is to be found in the Standing Information for the Madras Presidency published in 1879 in which I found it. The Government of Madras state now that the rule appeared there by a "misapprehension of the compiler." This is a remarkable plea for the Government to take after the lapse of so many years. Was the "misapprehension of the compiler" pointed out to Settlement Officers in 1879? Or, did they act up to the directions they found in the Government publication?

* *Note.* The Bombay Government in their letter which forms an enclosure to Lord Curzon's Resolution of 16th January 1902 state:—"The addition of 35 lakhs which accrued to the revenue in 1818 was entirely due to accessions of territory. The further increase mentioned was due partly to the same cause, partly to lapses of alienations." A correspondent to the *Times of India* who signs as "J." points out that there were no material accessions of territory to the Province of Bombay between 1818 and 1843, and proves from figures taken from official publications that my estimates of the increase of land revenue secured by the settlements of 1836 and 1866 are rather below than above the mark.

what definite grounds his landlord can claim an increase of rent; the latter does not know and cannot reckon beforehand on what definite grounds the Settlement Officer will increase the assessment of his field at the next settlement. Definiteness and certainty as to his liabilities encourages the Bengal cultivator; indefiniteness and uncertainty in the State demand paralyze agriculture in Bombay and in Madras. To such extent has this uncertainty led to over-assessment in some places that, while *rents* in Bengal average 11 per cent. of the produce according to figures given above, the *land revenue* (which ought to be one-half the rental according to Sir Charles Wood's Despatch of 1864) rises as high as 20 per cent. in Guzrat.

But *uncertainty* is a greater evil than over-assessment; human wit and ingenuity could devise no scheme better calculated to keep the peasantry of a country in a state of permanent penury and indebtedness than to subject them to enhancements on each recurring settlement on grounds which are not defined, which cannot be contested, which are not comprehended by the peasantry. Able and far-sighted Englishmen have protested against this uncertainty in land assessments for half a century. Lord Canning and Lord Lawrence, Sir Charles Wood and Sir Stafford Northcote, desired to permanently settle the land revenue in order to give some assurance and motive for improvement to the people at some cost to the State. And Sir Louis Mallet, in 1875, commented severely on a system, "which sweeps into the coffers of the state fifty per cent. or more of the net produce of the soil, thus diverting a fund which in countries where private property is absolute would, to a great extent, find its way back into channels of agricultural improvement. But the amount of produce thus diverted is not only large,—it is also uncertain." * * Whether the Government or the assessor leans to the side of indulgence or to that of severity, all the consequences of uncertainty

are equally involved. What those consequences are likely to be, it is needless to enumerate. It is enough to say that security and permanence are the essential conditions of productive energy."

In 1883, Lord Ripon endeavoured to remove this uncertainty, and to define the conditions of enhancement, we have stated before; but his proposal was virtually rejected. In 1900 the retired officials, who submitted their Memorial to the Secretary of State for India, once more urged that the conditions of enhancement should be defined. Lord Curzon has declined to give the Bombay cultivator this security, and has in the meantime taken away from him and the security which he had previously enjoyed under British Rule for over half a century. The proprietary and heritable rights, which attached to every field under the survey area, had been acknowledged by the British Government since the time of Sir George Wingate. Lord Curzon has sanctioned a law which empowers the executive Government to withdraw these rights from the soil.

ROMESH C. DUTT.

(To be continued).

R. T. Dutt's Works.

1. *The Economic History of British India*.—Just out. A History of Land Settlements, Trades, Manufactures, Industries, Finance and Administration, Rs 5-8-0.
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THE ROMANCE OF FORT ST. GEORGE.

FORT St. George is the heart of old Madras. It was the earliest possession of the English in all India and its history should be dear to us. But to the average Madrasite the spot had as much interest as Dublin Castle to the ordinary Irishman. It is a place of many offices and many barracks, and of little else. The soldiers know it and the civilians know it, but only in connection with the present. Its associations and memories are generally forgotten.

In the midst of this indifference it is pleasant to hear of a readable book that deals with the past of this once historic fortress. Living in the busiest part of modern Madras, Mr. David Leighton has found leisure to prepare a volume of bright sketches, treating of the good and bad old days of the place that he knows so well. It is appropriately named "*Vicissitudes of Fort St. George*,"* for it gives us a series of glimpses of the life and society of by-gone Madras, in its various changes of fortune, written in a style that every one can read. The subjects are those which will always be historically connected with this city, and all who come to Madras will wish to know about them. A vein of quiet humour pervades the pages and renders their perusal doubly entertaining. The book is conveniently short and can be read at a single sitting.

Mr. Leighton's presentation of the past through the medium of tableaux that appeal to the imagination has much to commend it. In this workaday world few will read history for history's sake. The standard historians of Anglo-India are singularly dull. Orme is wearisome and Wilks positively repellent. Even Talboys Wheeler's extracts from the public records pall after a little. The present generation requires to be amused as well

as instructed. No work written primarily as a history can hope to find favour with any one but students and enthusiasts.

It is this colouring that differentiates Mr. Leighton's little book on Fort St. George from the volume dealing with the same subject recently published by Mrs. Penny. Both these works are useful contributions to the history of the English in South India. Mrs. Penny carries the story of the Fort up till 1800. She discourses to us of its people, its registers, its church, its barracks, its sieges, its soldiers, and so forth. Mr. Leighton goes further than this. He has endeavoured to do for Madras what Mr. James Douglas has come forward to do for Bombay; to paint a panorama as it were of the whole Presidency. His sketches are not overburdened with references nor weighed down with detail. He does not claim to write history but is content, from the stirring events of the dead centuries, to select a number of purple passages. He shews us Madras as it was in the days of Coote and Clive, of Hyder Ali and Walajah, of Paul Benfield and Lord Pigot. Perhaps the best chapter in the book is the one entitled "*A Look Round*" which contrasts old with new Madras. Much of it is necessarily worked up from little-known histories and biographies: but Mr. Leighton is a burrower as well as a borrower. Not only has he made his readers free of his store of knowledge derived from sources of information now mostly old and mouldy: but he has thrown fresh light on many a striking personality and many an interesting episode. He briefly alludes to many Madras worthies of whom one would like to know more. The "*Madrasser*" of 1902 has well nigh forgotten the good old days John Company: and its pious memory is never honoured at our Civil Service Dinners. Mr. Leighton singles out on one page a few names from the eighteenth century Civil List, which may well make a modern Collector wonder. The first of these is Eyles Irwin. As Superintendent of Tinnevely and Madura, his popularity was so great that within two years he collected nearly half

* "*Vicissitudes of Fort St. George*" by David Leighton. Price Rs. 2-8 (Copies of this book may be had of G. A. Natesan & Co., Esplanade, Madras.)

as much revenue from the poligars, as had been paid to the Nabob's officials during the previous eighteen. There is something pathetic in the anecdote of his farewell. When the Nabob resumed his revenues, one turbulent old chief, who would not be denied, placed bags of rupees in his palankeen and when these were refused, insisted upon being one of the bearers for part of the first stage. Irwin retired in 1785 and lived until 1817. Quintin Crawford left Madras with a large fortune in 1870: settled at Paris and devoted himself to literature. He there became very intimate with the Royal family and on the occasion of the flight to Varennes in June 1791, was entrusted with the King's money which he transported safely to Brussels. Subsequently he lived with the Emigre's and assisted them liberally from his own purse. George Forster in 1782 accomplished the then remarkable feat of travelling overland from India to Russia. John Coxe Hippisley retired in 1788 and won a Baronetcy in 1796, by successfully negotiating a marriage between the Duke of Wurtemberg and the Princess Royal of England. Charles Oakeley, yet another civilian baronet was President of the Committee of the Nabob's assigned revenues from 1781 to 1784 and did his work so excellently as to be thanked by Warren Hastings and praised by Burke.

Perhaps time has thrown a glamour over the life of the Englishman in India in those palmy days. At any rate our predecessors knew how to make use of their opportunities. There was a youth for instance, named John Stewart, who came out to Madras as a writer in 1763. He was bold and independent and quickly informed the Directors of the abuses he discovered. The communications were regarded as "a curious specimen of juvenile insolence and audacity," and he thereupon resigned the Company's service "from a love of travel and through the possession of a soul above copying invoices and bills of lading to a company of grocers, haberdashers and cheesemongers." This renegade

rose to be General in Hyder's service and commanded one of his army corps on the day when the Tiger of Mysore was defeated in his retreat from Mailcota by the Mahrattas in 1771. Subsequently he became the Nabob's prime minister and for years afterwards was known in Europe and America as "Walking Stewart."

After all, it is not history, but romance such as this that interests that ill-defined individual known as the "general reader." What really is wanted is that some literary star should arise in the East and blend the history of Fort St. George and the romance of the old place into a historical novel. To our mind no better period for the purpose can be found than that opening with the year 1780. Ample "copy" exists in the works of contemporary writers. There is the account of the academician Hodges, who after beginning life as an errand boy in the streets of London, came out at the invitation of Warren Hastings to paint the gorgeous East. There is the narrative of Innes Munro, a subaltern in the 73rd or Lord Macleod's Highlanders, who gives the raciest description of Anglo-Indian manners a hundred years ago that can be read anywhere. There are the letters of the eccentric Mrs. Fay, who stayed in Black Town with the still more eccentric Mr. Popham, founder of the Broadway bearing his name. It is in her book that we find Madras compared to the Grand Cairo! There are the memoirs of Captain Philip Dormer Stanhope, *alias* Asiaticus, a turbulent individual who for a time commanded the ragamuffin battalions of the Nabob of Arcot. There is the journal of Alexander Macrabie, the brother-in-law and Secretary of Francis, and his travelling companion on the outward voyage, whose impressions of Madras open with the promising entry—"We were received like the fallen angels in a little hell of our own." There is the Madras correspondent of Hickey's *Bengal Gazette*, the first Anglo-Indian newspaper. There is the description in Miss Sophia Goldbourne's "*Hartly House*" the first Anglo-Indian novel. There is the *Madras Courier*,

founded in 1785, full of the quaintest advertisements and replete with local news of all kinds.

Nor will there be any lack of characters. Many well known names will flit across the page. We need only mention a few taken at random: Bernadotte, son of a country Attorney at Pau and Serjeant of marines in the captured French forces at Cuddalore; Barras, who, prior to the Revolution, served in the regiment de Pondicherry and was a prisoner on parole in Madras and Poonamalle, mis-spelt by him Pont Damale; Eliza Draper, Sterne's correspondent and the heroine of Eliza's tree at Masulipatam, where her uncle John Whitehill, was once chief; Tom Rumbold, who was in the celebrated council of war before Plassey and became a much maligned Governor of Madras, and eventually member for some rotten borough in England; and progenitor of a great Hyderabad banking family Swartz, the Protestant Xavier, the chosen guardian of many princes, honored through Christendom when living, and all but worshipped by the heathen when dead; the abbe Dubois, who laboured among the natives as a white Brahmin of a superior order from the West; and not least of all, Arthur Wellesley. It is a curious instance of our indifference to the past that the house the Great Duke once occupied in Fort St. George should be unknown to the present generation. Similarly the Palazzo Sessa at Naples, where Lady Hamilton lived with her hero Nelson has disappeared from the public recollection.

The career of our predecessors in the Land of Regrets is a marvellous one. Its history is no less marvellous. It has been told by philosophers, by merchants, by partisans of political parties, and by those who actually took part in the events they narrate. The tedious details of our many wars, the many strange names of princes and rivals, of agents and conspirators, the catalogues of towns and rivers serve only to confuse. Are we wrong in saying that these are possibilities for a romance in the vicissitudes of Fort St. George! Can it conjure up no novelist now-a-days? Are its heroes and heroines merely of the shadows that have crossed the Styx? If so, then truly fame is short lived. For these were famous in their day and in their world.

J. J. COTTON.

THE PROGRESS OF SOCIALISM.



F all the forces at work in the evolution of modern society none exercises a wider or more powerful influence than Socialism. By Socialism we mean, neither that vague desire for the amelioration of the lot of the poorer classes cherished by persons of a philanthropic disposition, nor that general tendency towards the acceptance of the principle of state interference to which Sir William Harcourt alluded, when he declared in one of his speeches that we are all Socialists now, but modern revolutionary Socialism, such as is advocated by the Social-democratic party in England, France, Germany and every other country in Europe. Socialists differ, and differ widely, with regard to many minor questions, but all are agreed in accepting the great ethico-economic principle that wealth should be produced for the good of the community rather than for the aggrandisement of the individual, and distributed in accordance with principles of justice, not as at present by a snatch what you can method, which allows chance, or privilege, or acquisitive cunning to determine what each man shall receive as his share. As regards the application of this principle also there is general agreement among Socialists. All hold that just, equitable conditions can be secured only by the collective ownership of the land, raw material, and machinery, which are the means of the production of wealth.

Socialism, though hinted at by some of the old Greek philosophers, and taught in spirit, if not in detail, by Jesus and his disciples, did not become a distinct and definite social impulse until about the middle of the nineteenth century. The leaders of the great social movement of the eighteenth century, which culminated in the French Revolution, while aiming at social equality, were so absorbed in the struggle for political rights that they failed to see that these were not an end in themselves, but merely means by which social

reform might be advanced and secured. They thought that the millennium must come if only a republic were established and every man given a voice in the government of his country. It was the disappointment which followed the awakening from this dream that brought Socialism into the field of actual, if not of practical politics. St. Simon, Fourier and Owen were the pioneers of the Socialist movement. They prepared the way for the new economics by preaching those new and loftier ideals, which are the inspiration of modern social reformers, but they mingled with their Socialism so much that was extravagant and absurd that the real value of their work is apt to be overlooked and forgotten. It was not until the latter half of the century, when Socialist principles were cast into the crucible of German thought, that Socialism began to assume a scientific form, and to justify its claim to supersede the older political schools. A revolution has been effected in economic science by the writings of Lasalle and Marx only comparable to that which has been brought about in natural science by the labours of men like Darwin, Wallace and Spencer. Outside of England there is now hardly a single economist of any repute who is not openly and avowedly socialistic in his teaching. Even in England, Mill, the greatest English economist, although condemning in his "Political Economy" the tyranny which Socialist systems were supposed to involve, declared in his "Autobiography" that after mature consideration he had come to the conclusion that he must be classed with the Socialists. "The social problem of the future," he says, "we consider to be, how to unite the greatest individual liberty of action with a common ownership in the raw material of the globe, and an equal participation in all the benefits of combined labour."

Socialist principles have spread and are spreading rapidly in every country in the civilized world. Even Japan, the latest recruit to the band of the great nations, can boast of a vigorous and well-organized Socialist party. In Europe Socialism has

made most marvellous progress. Twenty-five years ago the German Government, alarmed at the growth of Social Democracy in Germany, made a searching inquiry into the condition of the revolutionary movement in the various countries of Europe. The report, which was the outcome of this inquiry, declared that Socialism was making rapid progress everywhere, and that, unless checked in some way, it must inevitably result in a great social upheaval. This statement seemed at the time grossly exaggerative and unnecessarily alarming, but it has been more than justified by the event. If Socialist principles continue to spread, even as rapidly as during the last quarter of a century, there will soon be a Socialist majority in almost every legislative assembly in Europe. In Germany, in spite of, perhaps in part because of, bitter persecution at the hands of the Imperial Government, the Socialist party which could only poll 30,000 votes in 1867 now polls $2\frac{1}{2}$ million and returns 56 members to the Reichstag. In France the voting strength of the party has increased during the last fifteen years from about 30,000 to a million, and Socialist representatives hold so powerful a position that in the troublous times following the Dreyfus case it was impossible to form a ministry until their support was secured. In some of the smaller countries like Belgium the old Liberal party has disappeared from the political stage, and the Socialists are now the sole representatives of progressive thought.

In the British Islands alone Socialism has as yet failed to make its influence felt in Parliamentary elections. This is probably due to the fact that the more radical section of the Liberal party has shown signs of movement in the direction of socialism, and that the party, as a whole, has adopted as a part of its programme, certain reforms which Socialists regard as stepping stones to the realization of their aims. The British democracy is not likely however to follow much longer at the heels of a party, destitute of enthusiasm and distrustful of its leaders, which habitually acts as if criticism of

opponents could make up for lack of political ideals. The Liberal party has done good work in the past as the advocate of political and religious liberty, but its inspiration is exhausted, its work done, and it must give place to a party which has ideals and does not fear to strive for their realization. This change is probably much nearer than most people suppose. Socialism has as yet, I have said, failed to assert itself in Parliamentary elections. The statement needs qualification. At the last general election the Socialists, though heavily handicapped by their adoption of an anti-war policy, secured three seats, and succeeded in polling upwards of 4,000 votes in quite a number of the large manufacturing centres. The influence of Socialism is however much more apparent in local than in imperial politics. The Socialist party has now some 300 representatives on local and municipal boards, and has done very much more than its numbers would justify in determining the policy of these bodies. Perhaps the most significant fact however in English politics is the way in which Socialism has got hold of the Trades Unions Congress. Again and again in spite of reactionary efforts, this body which is representative of about a million and a half of the working men of the country has declared by large majorities its adherence to the principles of collectivism.

Within the last few months all the leading Trades Unions have decided to unite in a vigorous effort to secure something like an adequate recognition of the claims of labour within the halls of Westminster. Funds are being raised sufficient to support at least a hundred representatives, so there is little doubt that next election will result in the return of a powerful labour party. In the recent election at Clitheroe a labour candidate, pledged to support a Socialist programme, was actually returned unopposed.

Socialist ideas are indeed gradually permeating all classes of society in England and America, so much so that no political party dare appeal to its

constituency without promising at least some measures that tend in the direction of socialism. Mr. Chamberlain, as every one knows, has made much of the question of old age pensions, though he carefully avoids any attempt at its solution, while Sir William Harcourt, whose principles, if such a term can be used, are quite as far removed from Socialism as Mr. Chamberlain's, actually introduced, when Chancellor of the Exchequer, the principle of graduated and proportional taxation. The fact is, the social revolution has begun, and the Western nations are moving rapidly, though unconsciously, in the direction of the Socialist state. The old *laissez faire* doctrine, once accepted as axiomatic, is dead. It is its ghost that is at times paraded on the political stage by persons interested in the defence of long standing and profitable abuses.

So far as the British Islands are concerned, Mr. Gladstone's Irish Land Act of 1870 may be regarded as marking the beginning of a new period, the chief characteristic of which has been an ever increasing readiness to regulate the conditions of the production and ownership of wealth in accordance with the principles of equity. The legislation which has revolutionised Irish Land tenure, and the many enactments which have been made to secure the safety of workmen on land and at sea lead in the direction of Socialism and form precedents for much more drastic reforms. Parliamentary activity has however been completely overshadowed by the activity of local and municipal bodies. In the larger towns communal enterprise is taking the place of private effort in all schemes in which the interests of the community are evidently and directly involved. Water and gas are now in most places supplied by the municipality instead of by private companies, much to the satisfaction of the consumers, and the profit of the community. The municipalization of tramways is advancing rapidly, the results secured in Glasgow and some other great cities being such as to convince even the most conservative critic of the immense advantage of communal ownership and

management. In not a few towns too the municipal authorities have taken the first step towards the provision of house accommodation for the poorer classes by clearing away narrow filthy lanes and alleys and building streets of decent houses to be let at a fair and reasonable rent. Such measures as these have been carried out in the face of strenuous opposition, and at a cost which would seem incredible to those who live in a country like India where comparatively little is known of the intolerable burden of groundrents. In spite of their cost they are appreciated by the great majority of the people. Indeed there are many signs, not the least of them being the overwhelming victory won by the Progressive party in the last London County Council elections, that the people of England are awakening to a sense of the seriousness of the question at issue between the interests of the few and the welfare of the many. One of the most interesting features of the movement in the direction of municipal socialism is its unconsciousness. The average man who votes for the municipalization of a tram line, the carrying out of a municipal water scheme, or the opening of public baths and parks and places of amusement would indignantly deny that he had any sympathy with Socialist principles. "This isn't Socialism at all", he would protest, "it's simply common sense." Of course it is, and so long as the average man thinks so, Socialists need not complain of any quantity of ridicule or abuse that may be heaped on their theories. It is the thing not the mere name that is of importance.

A wonderful change has taken place in the attitude of the more thoughtful and intelligent classes in Europe towards Socialism during the last twenty years. The unknown is always dreaded, and twenty years ago the great majority even of educated people knew nothing whatever of Socialism. In ordinary respectable society an avowal of Socialist principles called forth much the same expression of surprise and horror as would have been manifested had one declared oneself

secretly addicted to cannibalism. The subject was always mentioned with bated breath, and if considered within the region of the possible was discussed as people discuss an outbreak of plague or famine. That sort of thing is at an end, and although there is still a great deal of unreasoning and ignorant prejudice against Socialist principles, one now rarely hears educated people denouncing Socialism as subversive of morality and religion and inimical not merely to the well-being but to the very existence of society. It is impossible now to be entirely ignorant of the principles of Socialism, unless one wilfully closes one's eyes, for Socialism fairly obtrudes itself upon one's notice. There is hardly a newspaper or magazine which does not occasionally refer to it, and no subject is more frequently dealt with on the platform and in the pulpit. Though Socialism is not yet generally accepted, its theories are as a rule fairly discussed and intelligently criticised. The old stock objections, once supposed to be irrefutable, are seldom heard, and when heard are generally listened to with a tolerant if somewhat contemptuous smile. Not more than ten years ago even it was not an uncommon thing to hear an intelligent man, of fairly wide information, declare that socialism was well enough in theory but unworkable in practice, since even if every one were given an equal share to-day there would be the same old inequalities to-morrow. Now, a man who had the temerity to argue in this style would be treated as we should treat a man who maintained the necessity of chattel slavery on the ground that without it it would be impossible to induce men to work.

To a certain extent the advocates of Socialism are responsible for the misconceptions that at the outset attached themselves to their teaching. Many of them have been so ready to mix with their Socialism any peculiar religious, or non-religious theories which they may have held, that it has been hard for the ordinary reader to know how much was Socialism, how much mere individual idiosyncrasy. Books too like Bellamy's

"Looking Backwards," and William Morris's "News from Nowhere," which give a description of an ideal socialist state, while they have done much to make Socialism attractive, have, by entering into details, given room for a multitude of objections which have really no bearing whatever on the main question. The study of social schemes is interesting and by no means uninteresting, but it is necessary to approach it with caution. "Everywhere," says Herbert Spencer, "sociological thinking is more or less impeded by the difficulty of bearing in mind that the social states towards which our race is being carried are probably as little conceivable by us as our present social state was conceivable by a Norse pirate and his followers."

Students of Socialism have now happily little to complain of on this score, for few Socialists now insist on acceptance of a detailed scheme of social organisation, and still fewer cherish the belief that such a scheme could be introduced and applied in a sudden and mechanical fashion. The change in the attitude of Socialists is even more significant than that which has taken place in the minds of their critics. Twenty years ago even the more moderate supporters of the movement thought that the changes they advocated could only be brought about by a great social upheaval, in which the privileges of the few would be suddenly and violently swept away, to make room for the rights of the many. Some believed that such an upheaval would come as the result of political agitation, others, like the late William Morris, scorned politics and maintained that the only hope of the future lay in an appeal to force. Morris's "Chants for Socialists" were veritable battle songs. When he sang of the coming day, "when the cause shall call upon us, some to live and some to die," it seemed to the young and the enthusiastic at any rate, as though those who hoped for a reconstruction of society had no alternative, but must sooner or later submit their hopes to the arbitrament of civil strife. It was only his experience of a riot in Trafalgar Square that convinced Morris of the futility of

his dreams of effecting a social revolution by a resort to violence. Socialists are not to be too severely blamed for indulging in such dreams. There are worse evils than war, and few who have seen much of the darker side of modern life would be inclined to deny that social regeneration would be cheaply purchased even though it cost years of fierce and bloody civil strife. The error lay in supposing that society could be remade by any such sudden and violent methods. Whatever may be advisable or necessary in a country like Russia, where thought is stifled and liberty unknown, Socialists are now agreed that, in countries where the popular will can express itself through constitutional channels, an appeal to force is not only a mistake but a crime. "It is not", as Liebhnecht once remarked, "the means but the aim that makes a party revolutionary." Socialists still assert, as emphatically as ever, the need of a reorganization of society, but they have learnt that such a reorganization as they desire cannot be effected by anything of the nature of a *coup-d'état*, but must come as the result of a slow and gradual movement in which a multitude of varied forces play a part. In taking this position they have necessarily become more or less opportunist in politics, and can consequently no longer be blamed for refusing to accept any measure of reform which seems to lead towards the realization of their ideal.

That legislation is moving, and moving rapidly in the direction of Collectivism is apparent from what I have already said. The only question is, How far will it advance before reaction sets in and some new and opposite tendency asserts itself? Socialists maintain, and a good many people who would not call themselves Socialists agree with them, that the tendencies which make for Socialism are so strong that legislation cannot stop until society has been reconstructed and established upon the basis of Collectivism. There is undoubtedly a good deal to be said in support of this opinion. It is impossible to deny that the system of

Individualism is breaking down on all sides. In every branch of trade and industry concentration is the order of the day. The capitalist is giving place to the company; the company is being absorbed by the syndicate; the syndicate claims, and makes good its claim, to control the whole trade of the country, if not of the world. In America this tendency has been so powerful that there is now scarcely a single branch of industry which is not in the hands of one of the great industrial corporations. It is impossible to read an account of the origin and growth of one of these huge syndicates, without feelings of the liveliest indignation. Their promoters have employed every artifice which cunning and treachery could suggest to crush their rivals and secure complete control of the market, and in some cases where strategy has failed they have not hesitated to resort to violence and crime. They have gained power by the most unscrupulous methods, and they use their power with a callous indifference to the well-being of the community. It is not easy to consider them as anything better than successful banditti who prey upon society, and yet, when we study the working of the huge enterprises which they control, it is hardly possible to deny that they have effected a vast economic saving which must ultimately benefit the mass of the people. They have done more than this, they have dealt a death blow to the whole competitive system, and by doing have prepared the way for the collective organisation and control of the industrial activity of the nation. "In proportion," says Kirkup, "as the centralization of industry is pushed forward, the easier will it be for the democratic people to displace its capitalistic chiefs and assume the control of it for the general good." The power of the syndicates is daily increasing and their influence is extending in all directions. Restriction or restraint is impossible. The present movement must go on until the whole economic life of each community is at the mercy of a few all-powerful corporations. Then the inauguration of a Socialist regime will be simply a question of time. An enlightened democracy, which has political power.

in its hands, will not long submit to industrial slavery. Sooner or later it will realize the folly of allowing a few great capitalists to control, for their own individual aggrandisement, great undertakings that might be managed by the community in the interests of the people as a whole. Then the crisis will come, and there can be no doubt as to its outcome. Just as easily as the Government of England, some half a century ago, set aside the old East India Company, and assumed control of the great Empire which it had organised and developed, so easily and naturally will each state set aside the mammoth capitalists who are at the head of the great industrial corporations, and assume control of all the various departments of trade and industry.

W. HOWARD CAMPBELL.



NORMANDY.

(FROM THE FRENCH SONG OF F. BEERAT.)

When all things have revived with hope,
And Winter's care is chased away,
When on our France's pleasant soil,
The Sun has shed a softer ray;
When nature wears her garb anew,
And swallows come back with the morn,
I hope to see my Normandy,
For 'tis the place where I was born.

To Switzerland and her green plains,
To her snug villas white as snow,
To Italy and her fair sky
My steps have wandered long ago;
But as I bid farewell to each,
I felt within my heart forlorn,
O there's no place like Normandy,
For 'tis the place where I was born.

There always comes a time in life,
When every dream must find its end,
When every contemplative soul
Begins its ruffled plumes to mend;
So when my sweetly-singing lyre
Has ceased its songs of love to mourn,
I hope to see my Normandy.
For 'tis the place where I was born.

M. R. PARAKH.

RIVAL CHURCHES IN MODERN ENGLAND.

WHAT are the respective positions occupied by Protestantism and Catholicism in England?

Are the minds of Englishmen turning more and more towards Rome? Why is it that reunion with Rome has come to be regarded and discussed in certain quarters as a question of practical importance? How is it that gifted and cultured ecclesiastics like John Henry Newman and men of rank and influence in secular life like Lord Ripon have left the Anglican Church for spiritual communion with the Church of Rome? Is there any reason for believing that, in the times to come, the Catholic Church will regain lost ground in England to an extent that will become worthy of note both there and abroad? Finally, what effect will Catholic restoration in England have on modern social life and ideals, and, especially, how is the non-Christian world at large, and how are we—the followers of the Veda—in particular, interested in the struggle which is to result in that restoration and its anticipated results?

In attempting an answer to these questions, it is a great advantage that we possess two excellent volumes of essays* by an Englishman—a member of the Society of Jesus—whose great ability, culture, acuteness and tact are apparent in every page of his remarkable work. Our appreciation of the author's merits and our obligations to him are all the greater for the reason that none can be more sensible than ourselves of the disadvantages which outsiders must necessarily labour under in attempting to comprehend the accumulated effects of the working of human nature in the realisation or development, within a circumscribed area, geographical and racial, of two such pretentious systems of faith as those with which we are at present concerned. Especially is the difficulty enhanced when, as in India, these faiths seek to

enlarge their numbers and influence by methods and on principles with which we confess we have never been able to sympathise for the simple reason that they are utterly opposed to all that the Vedantins—and, after him, others who have the advancement of human welfare at heart—must regard as truly calculated to help our race forward to its destined goal of spiritual peace, freedom and unity.

Three centuries back, Protestantism inaugurated a movement of which Europe to-day is witnessing the culminating point. If the Mediæval Church had grown into a mass of corruption, selfishness and greed—if the monks lived extravagant, luxurious, unchristian lives—if both the regular and the secular clergy, by their ignorance, superstition and worldliness, had become the laughing-stock of the laity—if the Papacy remained blind and unmoved by the signs of the times and allowed its spiritual power to be converted by the Christian hierarchy into their willing tool so as to maintain all the existing abuses and scandals—the remedy was not to disintegrate and destroy the principle of authority in any and every form and to enthrone in its stead the principle of freedom and private judgment in all matters relating to the spirit. Under the mask of appealing to the Bible against the Church and establishing its all-sufficiency as a guide to truth, the Reformation revolt really sought, as the result has proved, to raise the standard of reason against faith and to establish the position that the Bible and Christ are valuable not so much for the salvation of the spirit as for the satisfaction of man's social requirements on earth. Christians were no longer to be guided by Jesus to the Eternal Life before the throne of God but to secure social unity, political power, and intellectual freedom by the exercise of the right of private judgment and the abandonment of the principle of authority in all matters of religion. Centuries of continued strife, controversy, and aggressiveness have resulted in making men in Western lands regard religion—faith in God and

* "The Faith of the Millions: A selection of Past Essays" by George Tyrrell, S. J., (*Longmans, Green and Co.*, London, New York, and Bombay).

obedience to his commands—as a matter for investigation and inquiry and awaiting the gracious efforts of gifted men to receive the enlightenment needed to secure to it, in a larger degree than ever before, the acceptance and assent of mankind. In other words, Jesus did not come to minister, but to be ministered unto. The late eminent English theologian, Professor F. J. A. Hort, referring to the truth set forth in the famous saying of Jesus, "I am the way, the truth, the life," wrote as follows:—"Its evidence is to be found in the light which it brings far more than in any light which it receives." All truth and all preachers of the truth are valuable to us for the light and the rest they bring us, and not for what they can receive from us. Forgetting this solemn truth, men misconceive their vocation on earth and plunge into relentless war against the world's great creeds and prophets as if the latter were so many Mausers discharged against them for their destruction and death. What wonder that, in the words of Mr. Tyrrell, "in English-speaking countries her (the Church's) environment is to a growing extent that of a cultured Paganism." We perfectly agree with Mr. Tyrrell that "culture and civilization is not sanctification, and a certain height of sanctity is compatible with low culture." Protestant countries and peoples doubtless regard the possession of political power, abundant economic resources, and the daily growing empire of man over nature as synonymous with the progress in spiritual power and the love of God which is to lead to Eternal Life.

We must surely sympathise with the attempt to undo the mischiefs which have arisen in the West from what Mr. Tyrrell calls "a false presentment of Christianity." If the Christian Church exists on earth to any real purpose, it must be to render possible for men in the West, and especially for the inhabitants of Protestant countries, a return from their present "cultured Paganism" to the faith and works which will regain for them what Mr. Tyrrell, in admirable language, calls "Eternal Life, here

inchoatively, hereafter perfectly." But, first, we must clearly know what is the true conception of authority in matters of faith and devotional works? Who is to be accepted as the true bearer of the Divine Message, and why? We are entirely in accord with Mr. Tyrrell in holding that "as a man does not sacrifice his freedom of thought in yielding to evidence, so neither in yielding to God's Word." But the Christian Church has often abdicated her functions in this respect. The true Church of God is necessarily composed of all who have the light and can impart it to those who feel the call to lift themselves to His lotus feet. Mr. Tyrrell speaks of the "directive" and "coercive" powers of the Church. As regards *direction*, while one can certainly claim it on the ground of official position within a hierarchical body with traditions of apostolic succession, it cannot as certainly be denied to others who, having come within their influence, possess the requisite qualifications for communicating spiritual enlightenment. The Church would never have become hypocritical, worldly, tyrannical, and cruel, as it did in the era of the Inquisition and *autos da-fe*, if it had not drawn an impassable line of demarcation between clergy and laity and tried to keep the latter under its intolerable yoke of self-assertion and self-aggrandisement. In India, we have perfect freedom in this matter. The Guru need not necessarily be a Brahman, and a Brahman may even accept a Chandala as his Guru if he has the light of truth within him—if he knows the spirit of the scriptures, has realised the bliss of divine knowledge, and can recognise, too, the fitness of the aspirant after spiritual instruction and illumination. As for "*coercion*," it can obviously have no place in the region of the spirit; and that the Christian Church still seeks to regain its lost "temporal power" is to us the best proof not only of its having learned nothing and forgotten nothing from its record of trials and tribulations in the past, but also of its present want of all true appreciation of the teaching given to it by its founder when

he declared that his kingdom was not of this world.

Mr. Tyrrell has also our sympathy when he claims for the Church the right to "marshal all truth natural and revealed, into one harmonious whole." But the Church is only entitled to exercise this right without claiming the absurd, intolerable, and stifling prerogative of papal and ecclesiastical infallibility. If analytical reasoning cannot alone be accepted as an all-sufficient guide in determining our religious beliefs and practices, the same must be held to be true of the declarations, however unanimous, which emanate from the charmed circle of the sacerdotal body. To be truly Catholic, the Church must remember that rigidity in the definition of spiritual truth must lead in the end to the killing of the spirit and that, after all, the essence of spirituality lies, not in subscribing to a body of dogmas and rituals, but in the progressive approach of the human spirit towards its destined goal of spiritual realisation and union with the supreme. We certainly sympathise with Mr. Tyrrell when he says of the Church that "definitions are simply forced from her by the cavillings of the rationalistic or heretical mind." But we cannot but condemn her as intolerant, unregenerate, and unrighteous when she so far allows passion and selfishness to overmaster her as to shut her eyes and ears to the progressive realisation and discovery of spiritual truth and to insist on anathematising all new truths if they should not have been proclaimed by herself as part and parcel of the accepted Church dogma and even though they might truly represent all enlightened human experience outside the Church.

How is the Church justified in putting forward this exclusive claim for infallibility? Has she at her command any special medium or channel for the communication, acquisition, or realisation of the Eternal Verities, which is denied to those who are outside the pale? No. Does she claim to possess the revealing power, the inspiration, the gift of miracle—working which Christians believe to have

been vouchsafed by Heaven only to the favoured few who lived in the early ages of Christian history? No. The Church puts forward the claim to infallibility on the ground that she alone can and does follow the example of Jesus. Just as Jesus translated the mysteries of the Kingdom of Heaven into the "categories"—i.e., the language and beliefs—of the men of his own age, so the Church alone can and does, in age after age of her history, accomplish successfully the task of translating the "nascent mind of the primitive Church" and the successively—added deposits of tradition into the categories of the successive ages of her divinely—guided history down to the present. The Church does not claim to add an iota to the deposit of divine truth which by the ministry of Jesus had been revealed to, and embodied in the mind of, the primitive Church. But she claims to be the sole medium and agency for the progressive systematisation and the clearer enunciation of its full meaning as comprehended by the mass of believers in age after age of the world's history. "The Christian revelation," says Mr. Tyrrell, "does not admit of objective addition" and that revelation, moreover, is said to have existed in its perfect form only in the mind of the primitive Church owing to its capacity of receiving divine inspiration of which later ages lost the secret. How, then, can the Church rightly claim infallibility? Mr. Tyrrell offers a strange explanation. He says:—"If the Holy Ghost would no longer teach her all truth by continued revelation and prophetic ministry, at least he could bring all things to her memory that Christ had said into her, and would guarantee her correct understanding of those sayings which she was to keep and ponder in her heart." This attempt to obfuscate a clear issue—this ingenious device of making a distinction where there is no difference in order to get out of a present difficulty—cannot succeed. Mr. Tyrrell is evidently quite as much in the dark as anybody else as to the real distinction between the two forms of divine assistance which he mentions, and he is clearly

seeking to escape the unpleasant alternative of having to accept the fact that Christian doctrine is made up of truths gathered together by the Church, during ages of conflict and compromise, from such multitudinous sources as Judaism, Aristotelianism, Platonism, Mazdeism, and Hinduism. The late Cardinal Newman, on the other hand, is candid enough to admit the composite and eclectic character of Christian doctrine, and we make a present of the following extract from his writings to Christian controversialists of the type of Mr. Tyrrell. Newman writes as follows:—"The doctrine of the Divine Word is Platonic; the doctrine of the Incarnation is Indian; of a divine kingdom is Judaic; of angels and demons is Magian." Let us hope that Cardinal Newman's methods of expounding his creed are not yet altogether out of date in the Catholic Church.

Having commented freely on these important points relating to the Christian Churches and communities in England, we are now in a position to consider whether there is any near prospect of a reunion of the English people to the Roman Church. Mr. Tyrrell speaks of the late Cardinal Wiseman as "one who had dedicated himself consciously and deliberately to the revival of Roman Catholicism in England." So eminent a Churchman and one who is known to have been a shrewd and practical man of business would not have set himself to so great a task if he had not had sound reason to believe that, in the present religious condition of England, there were signs and portents of a popular movement or inclination towards Rome. Mr. Tyrrell tells us that both Cardinal Newman and Cardinal Wiseman were "agreed as to the main line to be followed in pushing the cause of Catholicism, namely, by a vigorous insistence on the exclusive character of that religion together with an equal, perhaps greater, insistence on the all-embracing width of its sympathies with every human interest." An "exclusive" religion was one which had dogmas peculiar to itself which placed it

in a category apart and which must be accepted as a matter of faith and not as one for argumentation, and the Church invited Englishmen to accept Christianity as an exclusive or dogmatic religion in the sense defined. Englishmen were henceforth to care more for the Church, and less for the Bible and the human reason,—as the source of all faith and works and as the infallible revealer of Christian doctrine. At the same time Englishmen were to be invited to know that the Catholic Church was quite prepared to support them in "pursuing every human interest" that had a dominant attraction for them as a nation. These two eminent English Cardinals thus offered what they considered the highest spiritual and worldly motives in order to attract the English multitude to Catholicism. In modern times, the chief national interests of Englishmen have been those of commerce and empire and so the Catholic Church is quite prepared to sympathise with these eminently "human interests" of the nation. This will no doubt prove an effective piece of subterfuge, if Englishmen are so profoundly stupid as not to see through it. Moreover, this kind of sympathy with "every human interest" which is dear to the heart of the masses of the English people need not be the monopoly of the Catholic Church. It is equally available to the Anglican Church and to every other sect and creed which may seek adherents and influence among the English people. Let us then pass to the other part of the new plan for converting England, viz., the Church's offer of an "exclusive or dogmatic" religious faith to the English people. On this aspect of the question, Mr. Tyrrell writes as follows:—"We are becoming more explicitly conscious of the fact that in all departments of knowledge and opinion the beliefs of the many are not determined by reasoning from premises, but by the authority of reputed specialists in the particular matter or else by the general consent of those with whom they dwell." In other words, all who go to make up the unthinking and busy masses of men take their religious beliefs either from the collective

sentiment of the crowd around them, or from the superior authority attaching to those who have come to be regarded as specialists in the matter. "There is an inborn instinct to think as the crowd does and to be swayed by the confident voice of authority," says Mr. Tyrrell. The Catholic Church is, therefore, to come forward, now as during the Middle Ages, "to provide, by means of a divinely guided body of authorities and experts, an universal, international, inter-racial consensus regarding truths that are as obscure as they are vital to individual and social happiness, and thus to afford a means of sure and easy guidance to those uncritical multitudes whose necessary pre-occupations forbid their engaging on theology and controversy." We must denounce the moral obliquity of the course recommended to the Christian Church in this passage, and we trust that, for the honor of that Church, its priests will disown the policy and principles which Mr. Tyrrell proclaims as "the ideal of a Catholic religion." But, further, we should like to know how, if the "authorities and experts" of the Catholic Church are "divinely guided," as they claim to be, the truths revealed to them can be "obscure." What God reveals God can and will graciously make clear. At the same time, no truth which is "obscure" to our understanding can be truly said to be "revealed" to us. Lastly, we cannot believe that the "uncritical multitudes" of England or any European country will have any kind of "sure and easy guidance" to anything worth having in heaven or earth, if they accept as guides to truth and righteousness this wonderful body of "divinely guided authorities and experts." Hinduism, indeed, provides truths of different orders for men of diverse grades of spiritual maturity. But these truths are simply like the ascending rungs of a ladder in which men occupy a higher or lower place according to their varying powers or opportunities of ascent. There is nothing "obscure" about these truths, whether higher or lower, to those who have got at them under proper guidance. Revela-

tion is a process of evolutionary spiritual ascent in which at every step there is a higher, truer and clearer appreciation of the infinite beauty, blessedness and purity of the Infinite Being which is light, law and love in harmonious and perfect combination. But, as the dogmas and methods of Catholicism are now expounded to us by one whom we cannot but regard as an able and attractive as well as an authoritative expositor, we take it to be a strange conglomerate of worldliness and other—worldliness absolutely without parallel in the history of Eastern religious sects and creeds. And, holding this view of the Church and its ideal, we cannot help saying that it will bring very little real help to modern societies in the West. We certainly sympathize with Mr. Tyrrell when he denounces the ideal of these Western Societies as "a civilisation such as that which now prevails in 'progressive' nations which, whatever good elements it may contain, is overtly unbelieving, gross, and animal-minded; which understands 'progress' only in the sense of the multiplication of comforts and the extension of commerce; which assumes as a first practical principle, a view of life which it is the first principle of the Church to deny." But, we ask, what positive view or ideal of life does the Church substitute when it has denied the "unbelieving, gross, animal-minded" utilitarianism and materialism of modern civilisation? We have just seen what, according to Mr. Tyrrell, that substitute is, and it is, as we view it, a remedy far worse than the disease. As followers of the Veda, we have no distrust of the principle of authority in religion. But we cannot but discard the authority of men who claim to be "a body of divinely guided authorities and experts" and who yet can offer to the millions of our race who are thirsting for light and freedom nothing better than a mere consensus of ecclesiastical opinion regarding a body of dogmas which Mr. Tyrrell can only describe as "truths that are as obscure as they are vital to individual and social happiness." No community of intelligent and responsible men will ever benefit by accepting as "authorities and experts" men who, in spite of their claim to be under "divine guidance," can offer the world not the light and love that is needed for gaining eternal peace and freedom, but the obscurantism begotten of their own very human spirit of self-confidence and love of ascendancy.

K. SUNDARARAMAN.

THE SECOND GRADE COLLEGES AND THE UNIVERSITY COMMISSION.

NOT the least momentous of the recommendations of the University Commission is that about the Second Grade Colleges. If the recommendation should be accepted, there would be no affiliation of a new Second Grade College by the Universities. The existing Second Grade Colleges would be required to become either First Grade Colleges or reduce themselves to High Schools within some limited period.

Confining ourselves to the Madras Presidency we find there are 38 Colleges teaching up to the F. A. Standard. Of these eleven are purely native or quasi-native Colleges,* six are State-supported Colleges, one Government, and twenty Missionary Colleges. Some of these may be badly equipped, may have an inefficient teaching staff and may deserve disaffiliation. There will be no room for complaint if, after due notice to the managing authorities, the University should take away from such Colleges the privilege of sending up candidates for the F. A. Examination. There are many others (and they form the great majority of the Second Grade Colleges) against which such charges of bad equipment or inefficiency of staff cannot be brought. They feel strong enough with the materials and resources they have to teach up to the F. A. Standard of the Madras University and to venture on doing more may be an act of folly. To insist on these institutions choosing between the status of a College and that of a School within some limited period appears to be a great hardship.

The University Commission seem to have purely sentimental objections to the continuance of the Second Grade Colleges. These do not evidently come under 'Colleges properly so called.' A High School, the members of the Commission are familiar with, a College teaching up to the degree

examinations they can recognise. But what is this that is neither the one nor the other? 'At home' they haven't got this overgrown High School, this under sized College, this neither fish, flesh nor good red herring; *ergo*, it must be abolished.

The break in the Arts course after the F. A. Examination is a necessary and a convenient one for many who want to qualify themselves for the Medical and the Engineering studies. Again the F. A. Examination is the minimum general test for certain governmental Examinations. The abolition of all Second Grade Colleges means the lessening of the facilities for studies of these youths who would stop their general education after the F. A. Examination.

The disadvantage is equally great for those who want to prosecute their studies further for the Degree Examinations. For the mofussil students who would have their F. A. studies completed practically in their homes, the abolition of the Colleges means the additional expenditure of a two years' further stay in town. This is an appreciably heavy burden for the middle class families from which we get our College students. For the poor scholars of whom we have no small number, it means that the doors of the University are shut on them as the additional outlay would be the proverbial feather for their none-too-sturdy backs.

Against this rather obvious disadvantage, two advantages have been suggested as more than compensating for the disadvantage. Many of the managing bodies and public spirited men would feel the necessity of strengthening the Colleges they had been hitherto half-heartedly supporting and they would see their way to raising the stronger of the existing Second Grade Colleges to the status of First Grade Colleges. They would be thus virtually bringing nearer the homes of many youths the facilities of an University Education. Those who are too sanguine of plucking this flower of safety out of the unwelcome nettle of danger may be asked to attend to the guarded way in which the Commissioners have expressed themselves about

* Native or quasi-native Colleges—Vizagapatam, Tinnevely, Tellicherry, Coimbatore, Coconada, Calicut, Berhampore, Madura, Salem, Palghat and Parilikemedi.

the raising of the Colleges to the higher Grade. It can be only done 'with due regard to existing interests.' Of the different classes of Second Grade Colleges above mentioned those that can be trusted to take care of themselves are the State-supported Colleges in Cochin, Pudukotta, Travancore and Mysore and the Mission Colleges. These have funds to command and they will be the first in the field to have their Colleges raised to a higher status. There can be nothing but good if our Maharajahs spend out of their boards some thousands more annually on the education of their subjects. To those among us who have no quarrel to pick with the avowed proselytising character of the Missionary bodies, who may perhaps think that the sooner we give up the outworn rags of our religion, the better for us all in the history of the future, there would be nothing to dishearten in the prospect of having more Missionary Colleges. The more calculating and worldly parents with no Christian leanings may think that their sons would have the swanlike discrimination of imbibing the milk of Collegiate teaching and letting the Christian teaching—what of it there may be—go by untasted. The multiplication of Christian Colleges saves us from making any self-sacrifices ourselves and we can have all the advantages of such altruism on the part of others; the view of these being very much the humorous one that the peasant took of his wife belabouring him: 'It amuses she and it does'nt hurt me.' But there may be many—not altogether a negligible minority—whose self-respect wouldn't allow of their sons attending Colleges when the first work of the day would be joining in an alien form of worship the effect of which would be to cultivate hypocrisy or hatred of one's own religion. These wouldn't relish the idea of the multiplication of such Colleges. But lacking in zeal for the spread of Western education as our wealthy men are, we cannot expect in the near future anything like what we see in America—men generously coming forward to endow Colleges and establish bursaries.

So the natural consequence would be the Mission Colleges would be the first to get raised to the status of First Grade Colleges and it would be against existing interests, as the phrase may be interpreted, to affiliate Native Colleges that may tardily come up to the Syndicate for permission 'to open B.A. Classes.*' The writer is not very hopeful of our men realising their responsibilities and rising to the needs of the situation. Nor is he so wanting in faith in his own countrymen and their future that he would hazard all on the present cast.

The second advantage that has been claimed for this recommendation is that the F.A. Students would have the advantage of moving on close terms of intimacy with the students of the higher classes and that they would be breathing a higher intellectual atmosphere and come in contact with a better class of teachers and that they would get more than an equivalent for the sacrifice they might have to make in moving further from their homes. Conceding all these advantages, one may perhaps suggest that the chances of individual attention are greater in the existing Second Grade Colleges with their comparatively smaller classes than in the First Grade Colleges with their crowded classes. Judged by the results in the University Examinations, the Second Grade Colleges have been more successful than the First Grade Colleges as regards the work of the F. A. classes. Such a thing must be expected. The F. A. Class students are the pet lambs of the flock in a Second Grade College and they naturally sink to a secondary position in a First Grade College. And with no injustice to the F. A. Class teaching in the First Grade Colleges it may be admitted that the best students for the B. A. Classes come from the Second Grade Colleges.

Thus it will be seen that the disadvantage set forth is unquestionable and the advantages

* The welcome that was given to the proposals to raise to the status of a First Grade College, Victoria College, Palghat, and the Native College, Coimbatore, may serve as an illustration.

mentioned are of an uncertain, doubtful character. The disfavour with which this particular recommendation is regarded seems to be pretty general. Even those who are optimistic about the recommendations of the Commission in general are opposed to this one. The missionaries no less than the managers of Native Institutions seem to disrelish the proposal. On this point at least there seems to be something like an unanimity of opinion among all interested in educational matters.

As an answer to the above objections to the recommendation, it has been suggested that it has to be taken along with the one immediately preceding it—that the School should be separated from the College and placed in a separate building and under a different management. Then of course the 'F. A.' Colleges would feel uncomfortable and without help from the High School receipts, their finances would prove inadequate to support an efficient staff. Nor would the First Grade Colleges fare better. If they have not funds and endowments to fall back upon, it would be impossible to supply them with teaching staffs worthy of the name. Except Government Colleges and one or two Missionary Colleges all other Colleges will have to be closed. Is this what is wanted by the Commission?

Let us suppose the recommendation adopted. We may have the High Schools and in addition to the already existing colleges some of the existing Second Grade Colleges elevated by superhuman acts of self-sacrifice on the part of the friends of education to the status of First Grade Colleges. If the existing Colleges should be found to be too few, there couldn't be any longer the natural development of a High School into a Second Grade College, that of a Second Grade College into a First Grade College. Any new College will have to spring up Minerva-like fully equipped with all appliances and means to boot from the brain of a philanthropist or from the active co-operation and enterprise of the people themselves. Is the retrogressive policy of lessening the number of Colleges, lessening the possibilities of enlightenment calculated to enlarge the scope of rich men's philanthropy, to teach them the need of spreading the light of knowledge among their fellow men? We have grave fears for the future if such a repressive policy should be pursued with regard to education. Well may the public feel alarmed that the tendency of the present recommendations is towards narrowing the field of education and making it impossible for the major portion of the Indians to avail themselves of the advantages of Western science and Western culture.

K. B. RAMANATHAN.

THE ABOLITION OF SECOND GRADE COLLEGES.

I gladly accede to your request to write something on the recommendation of the Universities Commission regarding the abolition of Second Grade Colleges. If there be any definite end in the Commission's numerous suggestions, it is at least safe to say that the enhancement of liberal education by the improvement of its quality is one, if not the chief end in view. We must do them the justice, I think, of believing that over all other considerations this is the main purpose of their enquiry. No one acquainted with education will for a moment question the need of advancement in this domain.

Among the Commission's plans to improve the quality of education the Second Grade College comes under review; and its abolition seems a necessary corollary from the main proposition. It has not seen fit to make any inquiry as to the work done in these Colleges, in fact, no witnesses were examined, to ascertain their efficiency or deficiency, and the conclusion was reached by the Commission, without any reference to the many interests involved. It is true, their abolition is to be gradual; but even "the stronger" of them "should be required to choose between the status of a College and that of a School, within some reasonable limit of time, and with due regard to existing interests." They, it seems to be the opinion of the Commission, stand in the way, or else are one of the weaknesses which lead to a depreciated degree; and hence their abolition is demanded in the interest of that progress in education which is to follow the general scheme of the Commission. It seems rather remarkable, that if their abolition was in the mind of the Commission, it should not have taken up such a proposition publicly, and at least allowed the men who have for many years been doing the work of these Colleges, a chance to show the reason as well as the

reasonableness for their existence and their continuance. The Commission passes on this body of men and these Schools as if they were an insignificant factor in the educational work of our Presidency—unworthy of consideration. It is doubtful whether, such *a priori* methods can be sound; and it is certain that such *ex-cathedra* conclusions can hardly carry with them much weight. It is a proposition to abolish within a comparatively short time 39 institutions with classes that average over 20 students each, whose work reaches about half the students reading for the First-in-Arts Examination, and whose invested interests are the accumulation of years of hard toil and patient waiting. A more heroic proposition it were hard to conceive; with a stroke of the pen, without a question looking toward efficiency, staff and equipment, the Commission recommends their abolition. That some time is to be given does not help matters very much, any more than delay a few days consoles the criminal to be executed.

As figures show, the Second Grade College is doing a large part of the work in our Presidency. It has been called into being by circumstances which are largely peculiar to India. It has been the pioneer in carrying higher education into the outlying districts, and it has filled a large place in the nation's life and educational progress of our Presidency, during the last twenty years. Under its fostering care many of the best men now in the Government service got their start. Our First Grade Colleges in the main have well filled classes and the distances to them make it a serious question for parents with the ideas of the average Hindu. All these points deserve consideration.

Besides, no one will deny the many advantages in favour of the smaller College over the larger one. Its classes are more wieldy, its students come into closer contact with its Professors, its course of study can be more thoroughly supervised, its work can be more thoroughly done. Twenty five or thirty lads in a class can get the individual attention of the Professor, which


is one of the best influences after all in education, whereas when classes run over a hundred, much of the work must be done by tutors, and the Professor can exert only a general influence. This has ever been the strong point made in America, and but recently made by the President of Williams College (one of the smaller New England Colleges) in favour of small Colleges against large ones; and the scholarship attained by the students of the former as well as the positions taken by them in after-life show that there is good, sound educational sense in the claim. The Professor's influence is immediately felt in the former, and notwithstanding the large endowment, great libraries and magnificent equipment of the larger, largely compensates for these superior advantages.

A last point I shall notice in favor of the Second Grade College is that the course proposed for it is quite within the ability of its staff, and with its attached High School, and with fair Government grants it can get all the equipment and buildings necessary for effective work.

There is no need for more to be said at this time. I am quite sure that no case has been made out against the Second Grade College. The theoretical reasons leading to the recommendation might also be urged against the First Grade College. If it be urged on the ground that it does not foster true University life after the model of our Western Universities, the same objection would hold good against all our College life. We may be allowed to grow into Western ideals, but things do not grow Minerva-like in India. When social conditions become more elastic, and when College life can be made College life as in the West, it will be time enough to talk about introducing the residential College with all its delightful associations and influences—a world in itself and a home to all within its walls during the years of training. No one with Western ideas would do anything to hinder such development. It is only because I fail to see that the Second Grade College in any way stands in the way of fostering such life that I cannot agree that its abolition at this stage in University development would be helpful to true College life.

L. B. WOLF,

THE RELIGION OF THE MAHARAJAHS OF MYSORE.

 F the many uncertainties abounding in the early history of Mysore the one relating to the religion of its early rulers is a much debated one and as such is of more than ordinary interest. H. H. The Maharajah of Mysore and household now profess the Sri Vishnava faith acknowledging His Holiness the Parakalaswami as their Guru. This were possibly sufficient to settle the question in favour of Vishnavism, for it is undoubted that at the rise of the Wodeyars of Mysore Brahmanism had regained its long lost native vigour as against the cornered and extirpated Jainism and Buddhism. But truth and falsehood are so inextricably bound up that the work of separation seems to be well nigh an impossibility. Thus, there are not wanting adherents to the belief that the early Rajahs professed the Jungum Religion which was after two centuries displaced by the Vishnavite faith. In confirmation of this it is alleged that even now the domestic servants and certain relations of the royal household are of Jungum persuasion.* This contention seems to receive some support from Col. Wilks, the reputed historian of Mysore, who, writing early in the 19th century says on the authority of various manuscripts he had access to that during the period the dominion of the Rajahs of Vijayanagar extended really or nominally over the greater portion of Southern India, two young men of the Yadava tribe named Vijaya and Krishna came from Vijayanagar to the little fort of Hadana, a few miles from the present situation of the Town of Mysore. Vijaya having married the daughter of the insane Wodeyar of Hadana in return for the aid he gave against her oppressor, the chief of Karuguhalli, became the lord of Hadana and Karuguhalli and adopted the religion of the Jungums or Lingayets in place of the Vishnavite faith to which he originally belonged.

Wilks further adds that "manuscripts are not agreed in regard to the date of this event, nor with respect to the number of generations which intervened between the founder of the family and Chama Raj surnamed Arbiral or the six fingered" whose succession he fixes at A. D. 1507. His descendant Chama Raja the Bold settled at Pairagiri about A. D. 1524 giving it for the first time the new name of Mysore. In A. D. 1610 Raja Wodeyar after obtaining peaceable possession of Seringapatam on the retirement and subsequent death of the Vijayanagar Viceroy "Tremul Raj or Sree Rung Rayeel" adopted the insignia of the sect of Vishnu, as one of the fundamental conditions for the deposition of the Vijayanagar Viceroy, in place of the Jungum Religion which the Rajahs of Mysore had till then openly professed. "Many, however," concludes Wilks, "of the subsequent Rajahs of Mysore are supposed to have secretly professed their ancient religion; and it is known to me that several relations of the house continue to do so at this time. Chick Deo Raj is the first who can unquestionably be stated to have made a public profession of the religion of Vishnu, about A. D. 1687."

Such in brief is a summary of a rather remarkable passage in Wilks' history. A close examination of it in the light of recent inscriptions shows on what flimsy foundations Wilks' manuscript authorities built up their versions of Mysore History. First, then, according to them, the original founder of the Mysore royal family came from Vijayanagar a statement not borne out by inscriptions, which uniformly state that he came from the *neighbourhood of Dwaraka*. Next, they would have us believe that it was Chama Raja the Bold that gave to the village of Pairagiri the name of Mysore. While the inscriptions are unanimous that the original founders settled "in the city of Mahisura," there is evidence to show that Mysore was in existence even before the Christian era. During the reign of the illustrious Asoka on the conclusion of the third Buddhist convocation

about B. C. 241., a *thero* was despatched to Mahishamandala, Banavasi and other countries for the purpose of establishing the religion of Buddha. A grant by Hari Varma, the third of the Gangas—a dynasty of kings that ruled the Mysore country during the first ten centuries of the Christian era—records a gift at Orekod, in the Mysore-nad, seventy, to a Brahman for overcoming in discussion a Buddha who had affixed a challenge to the gate of the palace at Talakad, the new capital of Hari Varma, boasting of his learning and maintaining the doctrine that annihilation was the highest happiness. Mr. Rice doubts the genuineness of this grant, though on what grounds it is not stated. It is perhaps on the basis that the grant is by a Jain king to a Brahman for defeating a Buddha with whom the king, as a Jain, ought to have been more in sympathy. But Jainism seems to have been antagonistic to Buddhism and seems to have had a separate existence in Southern India. One Akalanka Deva, for instance, a Jain of Sravana Belgola, is shown by Dr. Wilson to have confuted the Buddhists in argument at the Court of Hemasitala in Kanchi and procured their expulsion to Kandy in Ceylon. Again, the Buddha Temples at Devagond and Vellapalam were, according to the same eminent authority, destroyed by Jain princes in the eleventh century after Christ. This Hari Varma then, is shown by inscriptions to have lived between A. D. 247 and 266 and so Maisur-nad must have been in existence at that time. At the same time we have an inscription in the Mysore Taluq which points to the existence of the Town of Mysore about A. D. 1175 under the headship of a local chieftain. An inscription of Seringapatam Taluq shows that Bettada Chama Raja Wodeyar I, who ruled between A. D. 1423 and 1458 and was the father of Chama Raja the Bald, reigned at Mysore. Thus, it is apparent that Chama Raja the Bald was not the first to settle at Mysore and give it that name.

Similarly the story of the peaceable occupation of Seringapatam by Raja Wodeyar after Tremul Raja's death and his conversion to the Vishnavite faith as a stroke of political policy is far removed from the truth. On this point Wilks adds in an interesting note that in 1454 A. D. a Brahman Timmana obtained from the then Vijayanagar Rajah, Seringapatam, built a fort there and ruled the district. His descendants held the Government until the appointment by the Vijayanagar sovereign of Sree Runga Rayeel, a Viceroy with higher powers and a more extensive Government. Tremul Raj, the last of these Viceroys, was a relative of the Vijayanagar royal family. He, worn out with age and disease retired from the Government in A. D. 1610 to Talakad when Raja Wodeyar occupied Seringapatam and made it his own capital.

Thus it is obvious that Wilks fixes the appointment of the Viceroys Sree Rung Rayeel some time after A. D. 1454 and dates the close of their rule at A. D. 1610. Now it must be first observed that none of the published inscriptions of Mysore—and they fill nearly four or five bulky volumes—refer to the rule of these Viceroys at Seringapatam. A most elaborate and careful examination of several inscriptions of the first two volumes of the *Epigraphia Carnataka* shows that some successor of Timmana—name not known—was taken captive somewhere about A. D. 1509 by the Vijayanagar King Narasimha and he probably appointed some one as Viceroy at Seringapatam but it is not known who ruled till A.D. 1516 when we find one Veerappa Wodeyar ruling there. Probably it was he that was appointed by Narasimha. He was succeeded by Krishnaraya Nayak in A.D. 1520. He is called in inscriptions the right hand of the Vijayanagar King Krishna Deva Raja and is also called his agent—doubtless in the Mysore territories. He seems to have been succeeded by Bhogaya Deva in A. D. 1528. It is not known whether he was reigning till A. D. 1576 when we find Rama Rajayya making grants. This Rama Rajayya was succeeded by his son Thirumala Rajayya—the

Tremul Raj of Wilks—in A. D. 1585. It is certain that he neither retired nor died in A. D. 1610 as stated by Wilks, for we find him not only living but also ruling and making grants even in A. D. 1626. It is not known when he died. Probably it was in A. D. 1634, when, according to Mr. Rice, Seringapatam was conquered. If this is so, then the occupation of Seringapatam must have been in the reign, not of Raja Wodeyar who seems to have died about A. D. 1617, but in that of Chama Raja Wodeyar VI who ruled between A. D. 1617 and 1634. It was probably in the latter year that Vijayanagar Viceroyalty in Mysore came to an end.

We come now to the main question. Wilks states that on the marriage of Vijaya with the daughter of the Wodeyar of Hadana and the subsequent assumption of authority over the villages of Hadana and Karuguhalli, he gave up the Vishnavite faith for that of the Jungums. It is not known whether this was a nominal or a real conversion. But the evidence of inscriptions would seem to show that it was the former. Several of them state that the very object of this visit was to make obeisance to the Melukote Vishnava God. The earliest inscription now known of the Mysore Maharajahs is a Seringapatam one and is dated A. D. 1614. It shows that Bettada Chama Raja Wodeyar III, the grandfather of Raja Wodeyar who is stated by Wilks to have become an 'ostensible' convert to Vishnavism, was of the Vishnavite persuasion. That inscription records a grant of certain lands to the Melukote temple and Brahmans by Raja Wodeyar. It incidentally informs us that his grandfather Dodda Chama Raja Wodeyar—the Bettada Chama Raja Wodeyar III of Rice—of Mysore was of Athreya Gothra, Asvalayana Sutra, and Rigsakha, which is even now the *pravara* of H. H. the Maharaja of Mysore. Since the Jungumas have no such thing to describe their ancestry the possible inference is that Dodda Chama Raja Wodeyar who commenced to rule in A. D. 1513 was a follower of Brahmanism. His immediate

predecessors seem to have been three in number and they seem to have divided among themselves a period of about ninety years. It seems not impossible that they too were nothing more than nominal Jungumas.

The next Mysore King was Cham Rajah the Bald. An important Nanjangud inscription says that he was of Athreya gothra and this indicates his Brahmanical religion. His eldest son Muppin Deva Raja, a later inscription tells us, was named after God Varada Raja of Kanchi—possibly the reference being to that God's alternative name of Deva Raja. He was succeeded by his nephew Bettada Wodeyar of whom we know very little beyond that he ruled for a year or so. Then came Raja Wodeyar of whom Wilks says that on the retirement of Tremul Raj, the Vijayanagar Viceroy, to Talakad he took peaceable possession of Seringapatam in A. D. 1610. It has already been shown that this Tremul Raj neither retired nor died in A. D. 1610 to enable Raja Wodeyar to take possession of his capital. It is an incontrovertible fact that this Tremul Raja continued as Viceroy till at least A. D. 1626, for we learn from inscriptions that down to that year he was making grants. From this it follows that if Raja Wodeyar did not take possession of Seringapatam in A. D. 1610 then there was no occasion for his alleged change of religion from the Jungum faith to the Vishnavite cult, such change being according to Wilks one of the fundamental conditions for the deposition of the Viceroy. But, perhaps, the story of Raja Wodeyar's conversion has a foundation in fact. It possibly indicates the dissolution of the nominal adherence of the Rajahs to the Jungum faith. This seems to be confirmed from the fact that grants to Vishnavite temples and Brahmans commence in his reign and show themselves always on the increase in the succeeding reigns. Inscriptions show that he made grants to the Melukote temple and Brahmans, to the Srinivasa temple on Karigutta hill near Seringapatam and to God Ramachandra of Vahnipura in

Bannur. Perhaps we may, in passing, note, in regard to most of these inscriptions, one of their leading characteristics. It is that they record in the majority of cases grants to Vishnavite Brahmans and temples. Sometimes indeed the grants are in favour of Saivite and even Jain temples. But even in these latter cases they specifically record Vishnavite faith as the religion of the Maharajahs. Hardly any grants seem to have been made in favour of Jungumas.

The reign of Raja Wodeyar closed in A.D. 1617 when his grandson Chama Raja Wodeyar VI. succeeded him. He presented certain villages exclusively to Brahmans for securing Vaikunta Loka (the abode of Vishnu) to his ancestors. The inscription recording this grant says that he was born to Narasaraaja, son of Raja Wodeyar, by the blessing of Lakshmiopathi—possibly a reference to God Lakshmiramana of Mysore which according to ancient authors is the family deity of the Mysore Maharajahs.

The next important king was the great Kantirava Narasa Raja who came to the throne in 1638 A. D. Tradition is even now strong on the point that he was a strict Vishnava. This is confirmed by inscriptions, one of which recording a grant to Brahmans calls him "a very Narahari," a praise which is confirmed by another inscription recording a grant to Melukote Brahmans wherein the father of Kantirava is spoken of as a staunch Vishnavite and Kantirava himself as an Avatar of Sri Krishna, born to chastise the Turushkas—probably referring to his successes against the Bijapur general Rana Dhoola Khan. It is also known that he built a Narasimha temple and richly endowed it. He was the first to establish a mint in the Kingdom and the coins issued by him bore on the obverse the figure of Narasimha.

He was succeeded in A. D. 1659 by Dodda Deva Raja who was more famous for his religious munificence than for his administrative abilities. He built many villages for Brahmans and remitted assessments on their temples.

Thus it would appear that from the earliest times Vishnavism was the religion of the Rajas of Mysore. The next Rajah's dealings with the Jungums will show whether his family could be deemed to have had any sympathy with them or their religion.

Dodda Deva Raja was succeeded by Chikka Deva Raja, who is spoken of by Wilks as "the first who can unquestionably be stated to have made public profession of Vishnu in 1687 A. D." How far this may be taken to be correct must be evident from what has been said above about the religion of the preceding Rajahs. His early life was spent in the company of Visha Laksha, the Jain Pandit, at Yelandur. He cannot then have been a Jungum as is alleged by Wilks, for the Jain Pandit's sympathies seem to have been more with Brahmans than Jungums, as his murder by the latter and the recommendation of the Vishnava Brahman Tirumaliengaria for the premier's post in succession to himself would seem to show. Chikka Deva's financial measures raised a popular insurrection in which the Jungum priests appeared as leaders. This raised the ire of Chikka Deva against them. He cunningly entrapped them and murdered four hundred of them most perfidiously besides seven hundred others who were murdered in the several Jungum Mutts.

The successors of Chikka Deva Raja down to His late Highness Sri Chama Rajendra Wodeyar were all of the Vishnava faith even according to Wilks. This is also supported by inscriptions which record their grants to Brahmans and temples of that order.

It remains now to explain the statement of Wilks that he saw several relations of the royal household professing the Jungama Religion. During the time that Haidar had usurped the supreme authority of the State he turned out his opponents from the palace and therein located his puppet Maharajahs, one of whom Chama Rajah, the father of Krishna Raja Wodeyar III, he placed under the guardianship of the

Junguma woman Mudda Mullama. She seems to have conducted the business of the palace, and, as might be expected, surrounded the Raja with men of her own religious persuasion. This in time led even to matrimonial alliances with neighbouring families of that religion, families which had at one time enjoyed independent positions as local dignitaries or petty Rajahs. These are perhaps the families referred to by Wilks. Their religion in no wise alters the religion of the Maharajahs, for even when the latter marry into families of a different religious persuasion it is the first requisite of the marriage that the incoming party should embrace the religion of her lord.

Likewise the Jungum religion of the domestic servants may be referred to the insubordination of certain non-Jungum servants of Krishna Raja III. who summarily dismissed them and put in their place at the request of a favourite of his the Jungumas.

Finally we must note one curious fact. It is a well known custom that every Hindu names his children after the gods or goddesses peculiar to his own religious order. Now a close examination of the names borne by all the Maharajahs of Mysore from the earliest times to the present day shows that while they have borne certain names, such as Chama Raj, Chenna Raj, Raj Raj, and Deva Raj which are common to Brahman and the Jungumas, certain others such as Timma Raj, Krishna Raj and Narasa Raj, which are exclusively used by Brahmans, they never seem to have borne any names which are exclusively those that are borne by the Jungumas. Such for instance, as these that were borne by the Rajahs of Coorg—Vira Raja, Muddu Raja, Nanda Raja, Linga Raja, names well befitting the religion they professed.

Thus, various considerations lead us to the conclusion that Vishnavism has all along been the religion of the Mysore Maharajahs, a religion that in early times contributed not a little towards the consolidation of the rising state of Mysore:

C. HATYAVADANA RAO.

GUJARAT AND MODERN BENGALI LITERATURE.

It was with very great interest that I read the short but very instructive article on Modern Bengali Literature by Babu Jnan Chandra Bannerjea, in the issue of the *Indian Review* for June last. The rapid survey that he takes of the advance made by Bengali in almost every branch of her Vernacular literature confirms the opinion that has long since been entertained that hers is one of the richest literatures of the land. Riches in literature, like the riches of Vidya (learning) mentioned in a Sanskrit Sloka partakes of the singular characteristic that it does not diminish by being imparted to others. Without being conscious of it, Bengal has been doing for some parts of India what Sanskrit has been doing for it, and what English has been doing for the whole of the country enriching the various literatures by means of translations and adaptations of works written in the language.

Towards the end of his article Mr. Bannerjea expresses a hope that his suggestion as to the interchange of thought between one province and another of India, through translations of some of the gems of the literature of the one into the other—a consummation devoutly to be wished—would not altogether be thrown away. He will be glad to know that, so far as Gujarat is concerned, even years before the emanation of such a suggestion, it had turned to Bengal to enrich a branch of literature in which it is sorely wanting. The entertaining and voluminous novel literature of the other side of India had more than a dozen years ago tempted the essays of one who, though an indifferent student of his own mother-tongue had through several reasons been able to master Bengali. The name of the late Babu Bankim Chandra, and his masterpieces—his *Bishu Brikhha*, and his *Devi Chowdharani*, his *Ananda Matha* and his *Rajasinha* have long since been familiar to readers of Gujarati. Mr. Narayan

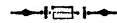
Hemchandra to whom belongs the honor of first introducing the delightful works of some of the best Bengali authors to Gujarat through the medium of translations, has one great drawback in his otherwise meritorious enterprise ; his translations are too literal, and preserve the Bengali idiom and syntax so unchanged that one feels as if one were reading Bengali in Gujarati characters. The way that he shewed, the penchant that was created in the reader of the *Jipani Prabhat* and the *Jipani Sandhya* even though closed in uncouth language, led others to explore the mine to a greater depth, and the result has been that the province has been able to secure for itself nearly all that is best in the fiction of Bengal. We need not burden this article with naming all these great names whose works have found their way into Gujarati ; it would be enough to say that Bankim Chandra Romesh C. Dutt, Sen and others have got an abiding place in the popular literature of the province.

Nor is it fiction only, which has thus got a hold on the mind of the ordinary reader. Poetry, such as the rarest gem in the poetic literature of Bengal—Michael Madhu Sudan Dutt's *Megha Natha Budha Kabya*, religion, such as the works of Babu Debendra Nath Tagore ; Biography—such as that of Chandi Charan Baneerjee's life of Pandit Ishwar Chandra Vidyasagar ; claims a number of readers which is daily increasing—most anxious and some of them very capable of interpreting the whole to their brother readers in choice language.

Whether it is due to the close syntactical resemblance between the Gujarati and Bengali or whether it is due to some other cause there is no doubt that within the last decade, the number of Gujarati students of Bengali has increased most perceptibly. So far as the rest of India is concerned, this fact at the best possesses but a merely parochial interest. But still one cannot help putting to oneself the question why it is so. Very

few people care to undergo the trouble of learning a foreign tongue simply for the fun of it. A great majority of people learn English to-day because it pays them to do so ; because they would be now here in the keen struggle for existence of the present day without it ; there is the mercenary motive at the bottom. Studying Bengali has no such hopes to raise in the minds of its students, because, here the appreciation of the work of the native author or translator has been till now so poor, that it is next to impossible to think that a Gujarati learns Bengali simply with a view to eke out his livelihood from that. There remains therefore only one alternative to account for the fact ; it is the homage that an inferior language always pays to its superior. Gujarati though rich enough—rich when compared with several other languages of India—is still poor compared to Bengali, aye, even to Marathi. And the fact of its having turned to Bengali for deriving some assistance therefrom is nothing less than an index of the struggle it has now entered upon of elevating itself to the level of other superior Vernaculars with the help of its cultured and patriotic young men, who are sincerely working towards that end. We wish them God-speed.

KRISHNALAL M. JHAVERI.



THE PROPOSED MUSSALMAN UNIVERSITY,

HERE seems to be in Northern India a project to establish a Mussalman University with Aligarh as its centre. As its name implies the proposed University is intended exclusively for the Muhammadans. A contributor to the last number of the *Indian Review*, Mr. Ibrahim Quraishi, B.A., hails the proposal as the panacea for the evils under which the Muhammadan community is at present suffering as regards the education of its youth. With all due deference to the well-meaning views of the gentleman, it is difficult to follow him where he attempts to make out a case for its existence. The

existence of a separate Mussalman University is likely to be attended with its own evils which far outweigh the good arising therefrom.

If the dreams of Mr. Ibrahim Quraishi were to be realised, there is reason to fear that much of the good done to the Indian nation at large by the other Universities may be undone by this University. It was an evil moment when some of the leaders of the Muhammadan community thought of establishing a College exclusively for the youths of their religion.

Whatever difference of opinion there may be as regards physical qualifications, the Hindu youth never falls short of his Muhammadan brother in intellectual, moral or aesthetic capabilities. The latter does not suffer in any way by being obliged to study in a College which admits students of all religious denominations.

One of the main functions of higher education is to remove racial prejudices and to create that catholic spirit in man which lays aside all religious differences and views the Indian nation as a whole. The chief object of a University is frustrated by the proposal under review fomenting as it does ill humours in its exclusiveness.

The salvation of both the Hindus and the Muhammadans lies in setting aside these differences and becoming one nation. The feasibility of such a union becomes evident when one thinks of the Austrian empire or the Swiss republic. There are certain traits of character in the Muhammadan such as intrepidity and straightforwardness which the Hindu sorely lacks, while the latter has in him some other qualities wanting in his Muhammadan brother such as intelligence and adaptability without which no nation can survive the international struggle for existence. The characteristics of the two races are, as it were, supplementary and these must be welded together to constitute a worthy citizen of the empire. If the Hindu and the Muhammadan young men that are to be the future salt of India were to be educated in separate Colleges, there will be little

scope for that happy blending and mutual exchange of ideas between them, which alone can make up for their respective deficiencies. The *esprit de corps* to be fostered should not be as Mr. Quraishi seems to think, of an exclusive nature.

Not without reason Mr. Quraishi fears that the Government may "not give its charter to the proposed University, because by doing so it would be encouraging sectarian institutions." This University is intended in his opinion to satisfy the special requirements of a special set of people. What are those special requirements which cannot be satisfied in the other Colleges? In such a case the Christians must have a University of their own, the Parsees one for themselves, and so on. If the principle is carried a little further there should be separate Universities for the various castes among the Hindus.

It is said that "the proposed University will aim at satisfying those precise conditions, the absence of which in the existing institutions has led to the educational decadence of the Indian Muhammadans. There cannot be any reasonable complaint of such a decadence. The old order of things has changed when Arabic, Persian and Sanskrit were the chief subjects of study. The new order of things has set in owing to the advent of the English which has brought along with it a flood of the Western light. The sacred languages of our country are no longer the gates of knowledge. They have been relegated to a secondary rank in the University instruction at present imparted. So there can be no imperative need for the existence of a special sectarian University for the Muhammadans.

The proposed University cannot be superior to the existing ones in spreading higher education among the Muhammadans. The scholarships which are proposed to be founded can as well find a place in the Colleges of the existing Universities. There are at present in our Colleges a number of scholarships exclusively enjoyed by the Muhammadans. Nor can such a University better

operate on public opinion and rouse from lethargy and negligence those Muhamadan fathers who could, but do not, educate their children." No Muhamadan considers it beneath his dignity to send his son to a College where young men of other nationalities also study. He does not seem to have any positive aversion to such sending. Only he does not take to higher education so readily as the Brahmin, not having as yet fully appreciated the benefits resulting therefrom. The remedy lies the other way, but not in founding a special University.

Another contention in favour of the new University is that "it will introduce among the Muhamadans a higher type of education than obtains in the country and that it will not merely give its graduates a quantity of information but make them a set of thinking people." Whether the existing Universities have failed in imparting that higher type of education is a question which is being thoroughly threshed out consequent on the report of the recent Universities Commission. If any thing is impossible for the present Universities even after the proposed reforms are effected, what better means the new University will have at its command, or what superior material it will have to work upon, it is difficult to understand. Better types of University can be brought into existence by the Hindus and the Muhamadans jointly than by any of them separately.

Lastly, Mr. Ibrahim Quraishi draws a glowing comparison between the proposed University and the mediæval Universities of Christendom, which, he says, "have largely contributed to the unparalleled advance which the West has made in Arts and Sciences." How far the mediæval Universities deserve the praise bestowed on them is open to question. They imparted an instruction "which consisted in verbal legerdemain which developed only the mechanism of reasoning and made the intelligence a prisoner of the formal syllogism." It was the renaissance that enfranchised the human mind, excited and revealed to itself the unconscious need

of instruction and by the fruitful alliance of the Christian spirit and profane letters paved the way for the modern civilization of Europe. The advent of the British rule and the establishment of the present Universities constitute the renaissance of India and let there be no reversion to the illustrated epoch that preceded.

This criticism has been offered not with any object of opposing the progress of higher education among the Muhamadans, but with the sincere hope that the energies of the leaders of that community will be directed towards the more practical means of spreading higher education among their people. Instead of wasting labour and funds on the proposed University, would it not be more useful to found a number of scholarships for the Muhamadan Students in the existing Colleges? By their individual as well as by their united exertions the leaders can induce their co-religionists to send up their sons for higher education.

J. SUNDARARAMAIAH.

In this connection we may draw attention to the following observations of the Indian Universities Commission. "In connection with the Muhamadan Anglo-Oriental College at Aligarh proposals have been put forward from time to time for the creation of a Muhamadan University. It does not appear that these proposals have received the support which would be necessary to give the scheme a practical character. And even if resources adequate to the formation of a complete University, were forthcoming, it is for Government to decide as to the expediency of creating a denominational University. In the present circumstances of India, we hold that while no obstacle should be placed in the way of denominational Colleges, it is important to maintain the undenominational character of the Universities." *Ed. I. R.*

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THE UTILISATION OF "WASTES."*

HERE are few more important subjects bearing on a country's industrial progress and development than the utilisation of all by-products and "wastes." Much has been accomplished here and in the United States in this regard during the last two decades, and undiminished attention is still being given to the matter, especially in America. It is significant of the place which the subject holds in the States that a Census bulletin has just been issued devoted entirely to a discussion of "The Utilisation of Wastes and By-products." Mr. S. N. D. North, Chief Statistician for Manufactures in the Census, in writing an introduction to the bulletin, points out correctly that it is impossible to measure statistically the addition to the wealth of the country created by turning to some useful purpose the residues which were formerly thrown away or left to rot, but the volume thus preserved must be enormous. As one indication, too, of the benefits resulting from such savings, it may be noted that in every instance cited in the report it is found that this utilisation has resulted in a definite cheapening of the cost of the products to the consumer.

Every particle of an organic or inorganic substance has a useful part to play in contributing to human necessities or pleasures, and when it performs no function towards some useful end, or remains dormant, it shows that the ingenuity and enterprise of man have not reached their fullest development, or that the arts of the laboratory have not revealed all the secrets of Nature. Taking the various industries, one after another, it can be shown what has been accomplished towards obtaining the object so much desired.

In the iron and steel industry the economic uses of furnace slag have been very greatly developed within the last few years. Formerly this slag was carted away from the furnace and was disposed of in the most available place as so much refuse material hardly worth the cost of carting. A considerable portion of this waste is now put to some profitable use as a substitute for artificial porphyry in the construction of buildings and for street pavements. Good bricks for one thing are made out of it. Slag cement works have also been established in a number of European countries, notably in Germany. Thomas or basic slag is now used by fertiliser manufacturers in large quantities instead of imported phosphate rock, especially in

Germany. A very important innovation in the metallurgical industry in Germany has been the utilisation of the waste gases of blast furnaces for working gas engines. This use adds a profit of \$1 25c. per ton in pig iron production. Gas engines for utilising these gases were introduced into Germany about 1898, and blast-furnace gas engines of large dimensions have already been erected at different places in that country.

In the case of lumber and timber, nearly all of the former waste products are now turned to some utility, and some of the new products thus formed are of considerable value. Of this latter class may be mentioned sawdust, which was formerly considered an absolute waste material, and was allowed to float down the stream or was thrown into a heap where it could be most conveniently disposed of. French cabinet makers have found a way of preparing this material which gives it a value far above that of solid timber by a process combining the use of the hydraulic press and the application of intense heat. By this sawdust is formed into a solid mass, capable of being moulded into any shape and of receiving a brilliant polish, and possessing a durability and a beauty of appearance not found in ebony, rosewood or mahogany. The production of acetic acid, wood naphtha and tar from sawdust is one of the latest enterprises in Norway, a factory having been started at Fredrikstad capable of distilling 1,00,000 tons of sawdust a year. The factory also manufactures charcoal briquettes which are exported to the Netherlands.

The utilisation of wood pulp in the manufacture of paper is not new, but its increased use is very marked. The utilisation of the needle-shaped leaflet of the pine tree, either alone or in combination with some other fibre, as cotton, for example, has frequently been attempted with more or less success, the purpose being to produce an article of commercial value for textile or other purposes. Near Breslau, in Silesia, there have been erected factories that convert the pine needles into what is called "forest wool" for wadding. In the manufacture of paper the recovery of soda is an instance of the creation of a valuable side product. The alkaline liquors in which rags and other paper-making material had been boiled were at one time allowed to run to waste, but this is no longer permitted in well conducted mills.

It is needless to say that slaughter-houses furnish a multitude of by-products which are utilised on a commercial scale. The products of the grey brain-matter of calves are now employed in the treatment of nervous affections. The blood from slaughtered animals has long been utilised for the production of albumen, for the use of the calico

* Reprinted from "The Investor's Chronicle."

printer, the tanner, the sugar refiner, and others. The bones of animals are used for a score of different purposes; those coming from the cooked meat are boiled and the residual fat and gelatine are extracted; the former is used in the manufacture of soap and the latter for various objects, as transparent coverings for chemical preparations, etc. The bones from the feet of cattle are used for whatever purpose ivory is used, since the hard bone takes a very high polish. The knuckles from these bones are cut off and used in the manufacture of glues and for fertiliser. The tips of horns are sawn off, and the horn is split and pressed out into a flat plate under heat and pressure. These plates are used in the manufacture of combs, backs of brushes, large buttons, etc. The tip of the horn is made into mouthpieces for pipes and various other articles. The horn scrap is used for fertiliser. Hoofs are sorted into three grades; white hoofs, which are sent to Japan and there used in the manufacture of various ornaments; striped hoofs, which are worked up into buttons and horn ornaments; and black hoofs, which are used in the manufacture of cyanide of potassium for gold extraction, and also ground up to make fertiliser for use of florists, grape-growers and others. Neat's-foot oil is extracted from the feet, and various oils are taken from different portions of the animals.

A valuable branch of the utilisation of fat of beef and hogs is the manufacture of substitutes for butter. A large industry has grown up in the manufacture of such articles as butterine and oleomargarine. Another important article obtained from fat is glycerine, which is brought into commerce as refined or distilled glycerine or as an element in glycerine soaps, toilet preparations, roller compositions, etc. Red bone marrow is another valuable by-product of the slaughter-houses, and so is gelatine or, in its lower grades, glue.

The woollen industry furnishes a number of materials formerly regarded as waste that are now utilised in the industry itself and for pharmaceutical and other purposes. The principal articles of waste are rags and wool-grease. The former is reconverted into wool, and used the same as the original raw material, while the latter is employed in other industries. The sheep obtains from the soil of the pastures upon which it feeds a considerable portion of potash which, after circulating through the system of the animals, is excreted with other matter from the skin and becomes attached to the wool. This excretion is known by the French as "suint," and oftentimes constitutes, together with the dirt that is mixed with it, two-thirds of the weight of the fleece.

The most useful by-product of the woollen industry is undoubtedly woollen rags, that may be re-converted into wool. Formerly these rags were mostly thrown away. No waste of this kind is now permitted, but every woollen rag, in whatever form it may appear, unless completely worn out, is re-used in manufacture to appear again in clothing. Such rags are used and re-used until there is absolutely nothing left of them that can be utilised, when they are mixed with hoofs, horns, and the blood from slaughter-houses, and melted with wood ashes and scrap iron for material out of which the beautiful Prussian blue is made.

The manufacture of cotton-seed oil and all of its resultant by-products is referred to as furnishing, as it undoubtedly does, one of the best examples of the development of a business based upon the utilisation of a waste product. Cotton seed was a garbage in 1860, a fertiliser in 1870, a cattle food in 1880, and a table food and many things else in 1890. It has been computed that as late as 1870 only 4 per cent. of the seed produced (from a cotton crop of 3 million bales) was utilised in the oil business. In 1890 this had increased to 25 per cent. of the seed on a crop of 7½ million bales, and in 1900 it was 53 per cent. on a crop of 9½ million bales. A ton of seed is estimated to yield about 1,000 pounds of hulls. One of the greatest developments in the business during the past few years has been the utilisation of these hulls for cattle food. Previously they were considered a great nuisance around the mills, and in order to get rid of them the mills used them for fuel, the ashes being utilised for fertilisers, as they contain a large amount of potash.

In the dyeing industry many by-products are used which have contributed largely to the great progress that has been made in manufacturing within the last one or two decades. Of these by-products the most conspicuous and valuable are those obtained from coal tar or gas tar, which, not many years ago, was a waste material difficult to get rid of. It could not be thrown into streams because of its polluting the waters, nor could it be disposed of by burial because of its destructive effect upon vegetation, and it had to be disposed of by burning. These by-products have now become of the highest value, not only for the production of exquisite dyes, but for medicines and disinfectants, and for the production of a saccharine substance several hundred times sweeter than sugar.

Space does not permit me to pursue this interesting matter further, but what has been said indicates that the subject forms an interesting chapter in the manufacturing development of the world.

HENRY G. KITTRIDGE.

The World of Books.

CAPT. JOHN BROWN OF "HARPER'S FERRY," by John Newton. (Mr. Fisher Unwin.)

How many of those to whom the lines

"John Brown's body lies a mouldering in the grave
But his soul's marching on"

are familiar, know anything of the man to whom they refer or the cause on behalf of which he perished? As Mr. Newton says on the first page of his book "it is very difficult for the generation which has grown up since the Great Civil War of America to realize the awful horrors of that system of domestic slavery which so long stained the fair fame of the United States and brought untold suffering upon millions of human beings whose only fault was that they had Negro-blood in their vein." At the time of the Declaration of Independence in 1776 slave holding was not only practised in each of the thirteen states of which the Union was then constituted, but was also recognised by law. Gradually however natural causes and greater moral enlightenment led to the gradual disappearance of slavery from the Northern States—and the growth of hatred and abhorrence for the system—which found expression in legislation so early as 1787 when the whole of the North West Territory was declared free ground on which it was illegal to hold slaves. With the admission of each new State to the Union the question had to be fought out whether it should be slave or free and for the next 5 years the slave problem was the great political touchstone alike in Congress and Senate. By the Missouri Compromise of 1820 an attempt was made to solve the problem by drawing a border line between slavery and freedom at 36° 30' N. Lat., south of this being dedicated to slavery and north of it to freedom, but "like all political compromises involving a moral question it brought only temporary peace." The extension of the Union westward, and the attempt of the Northerners to assert the right of Congress to prohibit slavery in all the territories of the Union led to another crisis, which was scarcely arrested by a second compromise which included a stronger Fugitive Slave Law jeopardising the safety of twenty thousand escaped slaves living at peace in the Northern States. The passing of Personal Liberty Acts however minimised the extent of the operation of this infamous measure. In 1854 was introduced the third Nebraska Bill which evolved two territories Nebraska and Kansas out of one and declared the Missouri compromise to be inoperative and left

the question of freedom and slavery to be decided by the territories themselves. This measure made Kansas 'the cockpit,' as Mr. Newton says of the contending parties—and the history of the next few years is largely taken up with the decision of the question whether this should be a slave or Free State. It is at this point that John Brown first becomes prominent. Born at Torrington, Connecticut in 1800, he had all his life been a sturdy sympathiser with the Negroes, but it was the accident of his son's having settled in Kansas which led to his giving practical demonstration of his abolitionist views.

A very determined attempt was made by the adjoining state of Missouri to terrorize Kansas into voting with the Southerners. In 1854 secret organizations were reformed all along the frontier—and these border ruffians rushed into Kansas, took possession of more than half the polling stations when the first election of a delegate to Congress was taking place, and, allowing no one to vote who was known to favour abolition, succeeded in securing the election of the pro-slavery candidate. The Squatters in Kansas were chiefly men from the North—with abolitionist sympathies, but for the time being they were worsted and the election of the Territorial Legislature in March 1855 was no less gross an outrage upon the principles of popular sovereignty. John Brown's sons were among the sufferers from the self-styled 'law and order,' men from Missouri—and it was in response to their appeals for assistance that John Brown left his home at North Elba in the autumn of 1855 to strike the first blow for freedom. A graphic account of the Kansas Border Wars will be found in Mr. Newton's pages. At Ossa Watomie Brown defeated a superior force of Missourians and afterwards at Lawrence the headquarters of the Free-soilers he was largely responsible for the repulse of a very determined attack. After two years' incessant labour John Brown left Kansas—having done much, but eager to do more.

The attack upon Harper's Ferry was not made until 1859. The interval was spent in preaching the crusade through the Eastern States, raising funds and preparing equipment. Harper's Ferry situated on the borders of Virginia near the junction of the Potomac and Shenandoah rivers, was at that time the U. S. Arsenal. John Brown believed that if a successful attempt was made upon it—a general rising of the Negroes would follow and the abolition of slavery become *A fait accompli*. On the night of 16th October 1859 accompanied by two of his sons and a few devoted adherents he left Kennedy's Farm where his stores of arms and ammunition had been clandestinely collected and

with little difficulty made himself master of the armoury. But a fatal spirit of indecision rendered the whole enterprise abortive. The slaves did not rise as he expected. An express train which he could have 'held up' was after a short delay allowed to proceed with the news of his attack direct to Washington; U. S. troops were sent to Harper's Ferry and on Tuesday the 18th October, Brown who had been maintaining a stubborn defence of the armoury for thirty six hours capitulated. Of his two sons one was killed in the fight and the other mortally wounded, and of his total force of 22 men ten were killed, seven captured and only five escaped. John Brown, himself unwounded at the moment of surrender received a blow on the head, and two bayonet thrusts from his enraged captors, and lay gnawing in pain for twenty hours before being taken to Charlestown Jail. After a trial, in which the bitter feelings of the pro-slavery party prevented him from getting a fair hearing John Brown was convicted and on the morning of 2nd December hanged as a common felon. But the cause for which he died did not die with him. Brown's daring attempt roused the abolitionist spirit in the North to fever heat and made Abraham Lincoln's election to the Presidency certain. Lincoln's election led to the Southern States voting themselves out of the union—and the results of the war which followed are a matter of history. "As the Northerners marched to victory through long years of bloody warfare, it was with John Brown's name on their lips, and his spirit in their hearts." Mr. Newton is to be congratulated on a singularly interesting biography. He is no blind hero-worshipper, but sees the weakness in John Brown's character as well as its strength. An extremely religious man, he appears to have believed himself to be God's appointed instrument for the abolition of slavery. The descendant of one of the Pilgrim Fathers, it may be said the Cromwellian spirit was in his blood. His letters and the glimpses of his home life afforded us show him to have been a devoted husband and a loving father. Perhaps not the least interesting feature of Mr. Newton's book is the way he shows how all the masterminds of America at that time, Thoreau, Emerson, Wendell Phillips and Whittier were in sympathy with John Brown's aims and even in the dark days after Harper's Ferry foresaw the far reaching effects of that splendid failure.

THE CONQUEROR: By *Gertrude Atherton*
(Macmillan & Co., London.)

A welcome addition to the series of powerful novels from the facile pen of this gifted writer. The book gives us the life-story of Alexander Hamilton, who was the brain of the American Republic during the troublous times which brought it into being and set it up to become to-day the most advanced community in the world. The character in which this rather submerged hero is now presented to us in the attractive pages of the book before us, will come as a revelation to those who are familiar only with the commonplaces of the current historic accounts treating of the American Revolution and the Great Republic. An illegitimate son of a Dutch mother and a British soldier, born in a remote island of the West Indies, Alexander rose to prominence by the sheer force of his supreme and unquestioned genius and exalted character, which had a unique opportunity for development in the romantic period of a great nation's struggle and re-birth. During the War, Alexander early attracted the attention of Washington, who promptly took him under his wings, and the infant prodigy thus became an infant Secretary, and soon in the fulness of time into an infant Minister as well. He was the greatest authority in Finance of his time, and one of the small band of powerful intellects whose labours have produced the modern science of economics. When not actively engaged in Politics, he was earning a lucrative and honorable income at the bar, where he occupied the foremost position, declining more than once the Chief-Judgeship of the United States. The conception of the Republic, the settlement of its constitution, and its safe navigation through the dangers of its early days are all traced to the luminous genius of this nation-maker and the name of even Washington sinks into significance, when we read the romantic presentment of this historic character so graphically sketched in the pages before us. The author very becomingly draws a gentle sponge over the notorious episodes of his private life, though there is no doubt that the account here given of the causes that led to the final duel has greater air of probability than the commonly accepted versions of this sad affair.

There can be no doubt that the author has admirably succeeded in the difficult art of relating a biography in the guise of a novel, and we can confidently recommend the book to our readers as a triumph in the department of novels "with a purpose."

A SKETCH OF THE VEDANTA PHILOSOPHY by M. S. Tripathi. (Cloth Bound Rs. 1-8 as. To be had of G. A. Natesan & Co., Esplanade, Madras.)

This excellent little volume presents to its readers a lucid and masterly summary of the leading tenets of the Vedanta philosophy. It also contains a short account of the life of an eminent modern Indian administrator and statesman who identified himself with that philosophy and served as an object lesson as to what it can do to elevate and ennoble human life. It has often been said that the Vedanta is a philosophy of dreamy idealism and depressing pessimism, and offers little or no guidance to the human soul in its struggle with the stern realities of life. Mr. Tripathi has shown in this volume the utter inadequacy of this view and further pointed out that the noblest teachings of the Vedanta harmonize with the mature utterances of the world's greatest thinkers, ancient and modern. That the human soul is essentially divine, that its entanglement in *Samsara* or the cycle of existence is the result of nescience, that the removal of its ignorance by the grace of God reveals to it its nature, purity and perfection and its oneness with the Universal Atman, that in this self-realisation it experiences a "peace that passeth understanding," and a "joy unspeakable and full of glory"—these are the cardinal doctrines of the Vedanta philosophy. Says Mr. Tripathi:—

The excellence of this philosophy is that it begins with the idea of God, who is, as it were, a circle whose centre is everywhere, and whose circumference is nowhere; who transforms into His own likeness the mind that receives Him. 'It is at once the centre and circumference of knowledge' and is capable of continual expansion. It leads to all that is good, just, and beautiful: 'It is at the same time the root and the blossom of all other systems of thought.' It is, in short, 'the record of the best and happiest moments of the happiest and best minds.' While general ideas are powerful, while obstructions are necessary, while mankind are apt to crave after perfection, and ideals have an acknowledged value, so long the Vedanta philosophy is sure to continue.

And again:—The task of the Vedanta is to teach the cognition of *Sachchidananda Brahman*. It (*Brahmagnana*) is the only road to the perfect beatitude, the highest aim of man, the final release. It establishes that *Jiva*, the individual self, is, in reality, identical with Brahman, the Highest Self, and is separated from It, as it were, only by a false surmise due to Nescience. The Vedanta assumes the doctrine of *Maya* from which suc-

cessive emanations proceed, to enable the student to understand more easily the inscrutable problem of Creation, and so on. *Maya* is super-imposed on Brahman by Nescience, Avidya, but when the higher knowledge arises she becomes sublated, and the identity of the self—the Divine in man and the Divine in the Universe—with the Highest Self becomes self-evident.

Mr. Tripathi has done great service to the students of religion by his learned exposition of these doctrines and by presenting them in a light which the modern mind can easily comprehend. He has brought together within a short compass the best that is known and thought in the world on the subject of the Vedanta and he will feel amply repaid for his labour if the ideal of life and conduct which he seeks to set forth in these pages re-awakens in the hearts of his countrymen a genuine enthusiasm for humanity and love for God.

THE PLEASURES OF LITERARY PURSUITS: A LECTURE, by E. Labouchere

Thornton. Price as. 4. (G. A. Natesan & Co., Esplanade, Madras.)

Out of the abundance of the heart the mouth speaketh, and that is very plain when Mr. Thornton speaks on his favourite topic of novelists and poets and historians. One feels grateful for his mentioning with appreciation men like Gladstone and John Morley, for it is not the fashion among the Indian Civilian to show any leanings towards liberalism in statesmanship when here. It is something that an Indian Civil Servant in talking to a Hindu Literary Union can say: 'In these days of 'Imperialism' it is significant to remember that the great Spanish Empire which was at one time the most powerful in the world has been reduced to its present impotence by a passionate greed for expansion beyond the limits which the resources of the Empire could cope with.' We can listen with edification to such a gentleman when he reproaches us for lack of moral backbone. Better counsel could not be given to young men than the following: "Gird yourself with the breastplate of purity and with the shield of truth. Be prepared to sacrifice everything for principles. Shake off the false fear of results. Win for your countrymen that reputation for integrity which it is the proud boast of Englishmen to possess. And then having enconced yourself in a halo of immaculacy, set before yourself the single aim of doing what you can to make the world a happier and better place when you leave it, than when you entered it." The booklet deserves to be read by all.

MEDICAL JURISPRUDENCE, TOXICOLOGY AND PUBLIC HEALTH by *Professor Glaister. (E. and S. Livingstone, Edinburgh.)*

We congratulate Professor Glaister on his happy idea of compressing three kindred subjects into a single volume, convenient in size and attractive in form. In these days of rapid book-making it is not the bulk which gives value to a work but the capacity of the author to put into a small compass what might in old days have been diffusely spread over many volumes, without at the same time allowing anything worth mentioning being omitted. From this point of view Professor Glaister's work is a departure from the time-honoured custom, but the departure is justified by the fact that many Examining Boards combine the three subjects included in the title for a single maximum, though in India Medical Jurisprudence and Toxicology are taken together, and Public Health forms a subject by itself. As the author says in his preface it is more rational to combine the three subjects of Medical Jurisprudence, Toxicology, and Public Health as they all deal with the relations of the Medical man with the Public and the State. Modern researches are chiefly in the direction of Preventive Medicine rather than of therapeutic measures as the greatest good to the largest number accrues from what concerns the public in general.

There is a significance in the order in which the subjects are taken up. First comes Medical Jurisprudence which treats of cases in which the medical man has little else to do than to help the administration of Law. The second subject of Toxicology affords scope for the medical man to help the law in ministering justice as well as to relieve the sufferer from the effects of poison. Third comes the most important subject of Public Health which deals with preventive medicine and defines the relationship between man and the State in matters affecting health, and in endeavours to secure highest happiness with least pain.

The book opens with a chapter on Legal Criminal Procedure. The next chapter on Medical Evidence is very elaborately written in which every conceivable difficulty is explained away. In India where the language of the medical certificate is English and different from the language of the people the difficulty of exactly gauging the significance of words and phrases is too often felt especially in the depositions given by the members of the less educated sections of the medical profession. To such the initial chapters are invaluable.

Under the head of Personal Identity, Anthropometry and Galton's finger-print-method are fully gone into. The former has not come into

use except in prisons and the latter is just now being enforced in public offices. Recently it has come to our knowledge that in a big institution the officers concerned allowed the finger-print of a wrong finger to be taken on the certificate. When it went up to the head office it was found that it did not agree with what had been taken before. False personation was suspected and the matter was investigated with the result that the discrepancy was traced to the carelessness of the office. Personal identity by the aid of scars, photographs and tattoo-marks is discussed in greater detail than usual. A most exhaustive list of cases and signs of death with a few appropriate remarks under each head is followed up by a consideration of their medico-legal bearings. Then follow laws relating to Death certification, which is compulsory in England not only on the part of the head of the family but also on the medical man under whose treatment the deceased was before death. It will be long before such a law could become practicable or useful in India where the quack, the Vidyān and the Hakīm still command greater confidence than the scientifically trained medical man of the English system.

Lunacy is treated only in its medico-legal aspects, its aetiology and treatment being left to be gathered from works on medicine.

The second section of the work on Toxicology begins by laying down the laws regulating the sale of poisons. These will naturally be found by an Indian student to be very stringent, as in India even uncertificated and unqualified persons are allowed to vend poisonous drugs. Although year after year chemical examiners recommend the enactment of laws which will restrict the sale of poisons to the trained and therefore to more responsible persons, the Government has not been able to see its way to carry out the recommendation fully. Four Chapters are devoted to poisons, and in addition to the classification and general considerations, symptoms, poisonous dose, treatment and the methods of chemical analysis are also given.

The third section embraces Public Health which is treated from the standpoint of the sanitarian. The arrangement is novel but the information is up-to-date. Diagrams of grates, artificial fans, valves, ventilators are far too advanced for India in general.

The ventilators, sinks, traps and such other modern contrivances receive a fair share of attention. But personal hygiene, food, clothing, exercise and such other subjects which concern more the individuals than the public in general are omitted. General considerations on Food are treated of in Text-Books of Physiology, but the means of

detection of poisonous or decomposed foods and adulterations come under the province of Public Health; also the microscopic examination of the materials of clothing men wear, and of the soil they live on. While due prominence is given to every modern discovery in connection with ventilation, waterservice, and sewage-removal certain matters such as those referred to, if included, would have added considerably to the value of the work. The author must have reasons of his own for omitting them, but if they are only to keep the size of the book within the limits of a single volume, it must be stated that completeness is sacrificed to convenience, and efficiency to appearance.

Chapters on oaths, professional secrecy and medical evidence are dealt with in so thorough and practical a manner that almost every conceivable difficulty which a medical witness is likely to meet with has been met.

The author has brought to bear on the preparation of the work his mature experience in the field in which he is an undoubted master. Throughout the work discussions of theories and opinions are subordinated to the exposition of the principles of practice. Cases from authentic sources are chosen to illustrate the principles inculcated. The woodcuts are all happily selected and are remarkable for their clearness. Sections of the Code of Law are interspersed throughout the text so as to make any reference to legal Text-Books almost unnecessary. Information of purely legal nature is given in small type so that it may be skipped over by the general reader.

BETWEEN THE DARK AND THE DAY LIGHT: *By Richard Marsh. (George Bell and Sons, London.)*

Under the above rather esoteric title, we are treated to a number of exceedingly well-told short stories. All the stories are very interesting reading, particularly "The Juryman" and "Em." A Juryman in a sensational Will case, by the most extraordinary coincidence, finds that he is the most material witness in the case going on in court before him as it was he who had carelessly lost the bag which had contained the lost Will whose existence was in dispute in the case. The hunt for the Will by the desperate and conscience-stricken Juryman who of course finds it at the last moment and thus saves a catastrophe for the young lady whose fortunes depend on it, is told with graphic touch and wealth of humour. We have no space to enlarge on the merits of the other tales. For these we must refer our readers to the book itself. They will amply repay perusal and will afford very enjoyable company during odd half hours or on a Railway Journey.

JOURNAL OF THE SOCIETY OF COMPARATIVE LEGISLATION. *Published by*

John Murray.

The appreciative notice of the life of Lord Watson which leads the contents will be read with great interest in this country. Lord Watson was the strong Judge of the Judicial Committee of the Privy Council in his days. He is responsible for many a pronouncement on Indian questions. Though we cannot say that his decisions were always right, it was clear from the outset that a very strong and clear intellect was being applied to the elucidation of Indian Law.

Mr. Haldane's discourse upon the constitution of the Empire and the development of its councils is more political than legal. It is no doubt not easy to draw the line between political and legal considerations in discussing constitutional Law, and if there is more of statesmanship and less of legal suggestion in the paper, it is due to the fact that Mr. Haldane though a very eminent lawyer is a greater patriot even. We have the fault to find with the admirable paper of Dr. MacDonnell on the number of Judges in different countries. He does not seem to recognise India at all. No country is better served by its subordinate judiciary than India, nowhere is the pay more inadequate and in no part of the world are there less number of judges proportionate to the population than in this country.

Books Received.

MESSRS. LONGMANS, GREEN & CO.

History of Civilisation in England by Buckle ... 3 vols.
Longman's Historical Series for Schools Book 2.

MESSRS. JARROLD AND SONS.

More Tales from Tolstoi translated from the Russian, with an enlarged biography of the author by E. Nisbet Bain.

MESSRS. LUZAC & CO.

The Economy of Human Life translated from an Indian manuscript written by an ancient Brahmin.

MESSRS. SWAN SONNENSCHEIN & CO.

The Religious Life of Queen Victoria by Walter Walsh.

MESSRS. MACMILLAN & CO.

Arithmetic for Lower Secondary Schools by G. K. Gokhale B.A.

MESSRS. GOPAL NARAYAN & CO.

Religious and Social reform—a collection of essays and speeches by the late Justice M. G. Ranade.

ENGLISH PUBLISHING HOUSE.

Kamala's Letters to her husband by R. Venkatasubba Row, B.A.

THE PIONEER PRESS, ALLAHABAD.

From Bombay to Parandhar *etc.*, Poona by S. M. R.

Topics from Periodicals.

REFORM IN THE GOVERNMENT OF INDIA.

Mr. C. W. Whish a retired Indian Civilian in the course of an article in the September number of *East and West* pleads for a series of reforms in the Indian Administrative system, reforms the adoption of which according to the writer would be a much better support to the British Government in India and a better safeguard against Russian designs than an aggressive forward policy which apart from its costliness "ends in the attention of Government being so much taken up with matters outside India, that the much more important subject of internal affairs is neglected." The reforms which according to Mr. Whish "will strengthen our hold on the affections of the Indian people," are six in number.

1. An imperial contribution to "the cost of the Indian army as" it will probably satisfy India and create in the minds of the leaders of her political thought the conviction that we really desired to be true and just in all our dealings with her.

2. A cheaper administration. What is wanted is total remodelling and reconstruction.

3. A greater regard than at present is shown for the wishes and feelings of the people. The great lesson of the other side of the shield, the ability to look at things from points of view other than our own though perhaps more important than any other is yet the most difficult of any portion of the training and discipline of life.

4. The plunder and oppression of the people under legal forms is an evil which can only be remedied by radical changes in the present system of Government.

It is in the Courts of law that this "legal plunder and oppression" takes place in the most glaring manner. There are not a few thinkers on Indian subjects, who consider that the whole machinery of European jurisprudence, with its attendant myrmidons in Stamp and Registration Law, and the like, is utterly unsuitable for India. The pure justice which is to be found within the Courts, and which the people value so highly, is often obscured, and kept away from those who need it most, by the atmosphere of complicated procedure and manufactured evidence hanging over them. Simple laws, codified wherever possible, a simple and a more final system of justice is loudly called for.

5. The Parliamentary representation of India. One of the simplest methods of solving this question would be to induce the semi-independent princes to accept a seat in the House of Lords.

6. The resuscitation of the village communities. What is wanted is:—

A soil of self-government thoroughly suited to the country, and one adapted to the purpose of political education, an intermediary between rulers and ruled, and a means of instruction to both as to the views and wishes of the other. A machinery for softening the asperities of our administration in almost all departments, and particularly in those of Land Revenue, Jurisprudence and direct taxation. An organisation for the supply of capital to the agriculturist on easy terms, and for the utilisation and fructification of his savings. A means of spreading the knowledge of agricultural improvements and stimulating commerce and technical education. A means of controlling the evil-disposed members of the village community and giving a direct stimulus to morality and orderly life. Also a means of checking the undue consumption of intoxicants.

Referring to these needed reforms suggested by Mr. Whish, Mr. Richard Charles Saunders writes to *India* stating that none of them appears to be in the category of boons. Mr. Saunders suggests the following:—

(1) An Imperial Advisory or Privy Council for all India composed, in the first instance, of 200 selected hereditary Princes and Nobles of the highest rank, an elected Committee of which to form a Court of Peers, with rights and privileges equal, at least, to those belonging to Peers in England. (2) Provincial Advisory Councils composed of local hereditary nobles and other eminent men. (3) A solemn declaration that no Indian Peer or hereditary Prince shall be injured in his freedom or his property except after open trial face to face with his accuser and judgment of his peers, selected by ballot. (4) A solemn confirmation of Her Majesty's Proclamation of 1858 and 1887 that the Imperial administration in India will not permit the least interference with the religion of Hindus, Mahomedans, or others, and will visit with its severe displeasure any such action as that indulged in of late years by certain Judges of the High Courts and certain Magistrates, for instance in the case of the Raja of Puri and others. (5) Admission of one-third, or at least three Indians, elected in India, to represent India as Councillors at the India Office. (6) Confirmation of the right of primogeniture to all Imperial Indian Peers and all Provincial Indian Peers who may be considered entitled to it by a Court of Peers. (7) A release and proper treatment of all State prisoners, especially the surviving members of the Delhi family, the ex-King of Burma, and a large number of others illegally and secretly deprived of their freedom, without urgent necessity and without trial. (8) Extension to all India of the Office of Coroner, and the conferring on Municipalities and District Boards of the right to vote in their election. (The present power for mischief of the Police is largely due to the absence of Coroners.) (9) A reform in the appointment of, reduction in, the numbers and powers of Political Agents throughout India.

THE IDOLATRY OF BOOKS

A quaintly-written but bright and suggestive article in the *Commonwealth* for September is on the Idolatry of Books. First of all the author, Mr. C. L. Marson, enforces the often-forgotten lesson that education is possible without books, at all events without many books. He refers to Athens of old where every man could be said to have been liberally educated, not by study of books, but by access to "theatres and temples and public feasts and lecturers and disputers and orators and rhapsodists and reciters." A really healthy-minded and healthy-bodied child at school rebels against the tyranny of the teacher who uses the book as an end, not as a means to real knowledge. Books in themselves are stupid, uninteresting, masses of dead matter. About the bookworm, Mr. Marson says; "The gluttonous reader, swollen with second hand ideas, his memory crammed with other folk's opinions, has no room left for either intelligence or knowledge." Experience, actual personal contact with nature, is true education—the only way of acquiring knowledge and wisdom. Books are poor substitutes therefore; they may be useful for calling up images of old scenes and forgotten events. For knowledge of the past, books written by geniuses able to give life to the dead, as it were, are useful, but these must be used well, not idolatrously. But after such great books are "thousands of things with leaves, print and covers"

"These are those hateful and choking ABC books, Readers, Keys, Manuals, Text Books, Students' Helps, Tables, tricks and tags for memory, Primers, and such like. Actually some people are so shockingly idolatrous that they think that a child who has learnt the Alphabet, or the multiplication tables, or the wretched poem of *Casablanca* (type of the superstitious and legal spirit) is somehow better educated than a liquorice-coloured black boy, who can plait baskets and catch wild duck. What is called primary or elementary education is not education at all. It is the mere learning of the slang of the game—just as to learn to mark at billiards is not billiards, and to say "duce vantage." &c., is not tennis."

There is a curious comment on the multiplication of Table which must be quoted. We all leap and fully believe that twice one is two. Do we ever question how far it is true and in what spheres?"

"But is twice one two? Twice one is usually much more than two. It always is in men. 'In mice twice one is pretty soon a barn full; in boxers it means a fight; in moons it implies a storm; in vision it suggests drunkenness. Nearly every deduction from this formula is palpably false. Put a man to move a weight, then put two men. The result is by no means that the two will move it exactly twice as far as the one did. Once one is possibly nothing; twice one may be 40 or 100. The Arithmetic tables are good or bad, true or false, according to their use and application. Unused or unapplied, they are not venerable in the least. They are like other idols, nothing in all the world, but sad snares to weak brothers—educationally weak that is. If people use them as convenient supposition—bits of mind-string for tying things together—land marks or butter crosses where market folk can gather, sign posts for roads, &c., then these tables are serviceable enough. But do they?"

WOMAN AND MARRIAGE.

"Confessions from a wife" is a readable contribution in the September number of the *Century*. The following observations are worth reproducing:—

Tolstoy says that people should marry in the same way as they die—"only when they cannot do otherwise."

In the main condition of civilised human happiness, is there terrible structural fault? Is the flaw in the institution of marriage itself, or is it in the individual?

Why did Dana find it impossible to be happy on the terms of married life? Other men are. But are they? Is society dancing under a white satin mask—the sob or the grimace beneath? Is my lot only more crudely or vulgarly expressed than others selected from the general experience—a cry instead of a satire? Dana loved me—madly once, dearly afterwards. Why did not the dearness remain when the madness had gone? Must a man cease to value because he has won? Is this a racial trait; or Dana's trait? Am I meeting the personal misery, or the fate of my sex? Why, when I endured so much, could he bear so little? How, when I cherished, could he neglect? Why, when my tenderness clung, could his unclasp?

Once I was a proud girl. Plainly, I should never have become a loving wife. That was a mistranslation of nature. It was the Descent of Woman. If this which has befallen me is *Man*, not *Dana*, then some woman of us should lift her voice and warn the women of the world what woe awaits them in the subterfuge of love. Now I remember my dream—how I sat in the amphitheatre, and saw myself and Dana on the stage, and blamed myself for the excessive part that I played in my tragedy, and the house rose upon me from the pit to the boxes for it was serried of women, and they said: "You are, ours, and of us, forever," and I cried out upon them "Then womanhood and manhood are at civil war!"

Why does a woman trust herself to love, or to her lover? Friendship is the saner, as it is the safer thing.

If it is *Man* not *Dana*, what then, I say? It is conceivable that the time might come when the Princess in the great Medley of Life should make no feint of battle,—to be beaten, poor girl, by all the military laws,—but in some later, wiser day should gather her forces, and order her heralds, and proclaim the evolution of her will: "We give you all that history has taught us you can be trusted with—our friendship, sirs. For the rest, we do reserve ourselves."

THE BOER GENERALS.

In the September *Review of Reviews*, Mr. Stead describes in his usual magniloquent style, the character of President (not ex-President) Steyn, and Generals Lukas Meyer, Louis Botha, De Wet and Delarey. It is impossible to abridge his brief sketches for our readers, but suffice it to say that he has unstinted admiration for their patriotism, endurance, bravery, and chivalry. It appears that Generals Lukas Meyer, Botha, and Delarey with four others were against the despatch of Kruger's ultimatum. "Of these seven who had voted against the war, when peace was made every one had been either captured, killed, or had kept on fighting to the last. Of the twenty-one who had voted against peace only two were either captured, killed, or wounded in the war which their vote had precipitated." Mr. Stead begins his character sketches with the statement of a bold paradox—that "while technically and on paper we have destroyed the Boer republics, we have really constituted on imperishable foundations the African State." This paradox he makes out on the authority of Sir W. Jones's lines to the effect that a state is constituted not of fleets or forts, but of brave patriots and high minded men who know their rights and can maintain them. It is perhaps well to extract a few of his concluding paragraphs.

Whatever may be thought about the origin of the war, and the mistakes and misunderstandings which brought it about, even those who most regret the policy of President Kruger may admire without stint and acknowledge without hesitation the splendid services which the Boer Generals and their people have rendered to mankind. Their magnificent courage, their uncompromising devotion, their uncomplaining self-sacrifice in the cause of their national independence make us all their debtors. The human race after all is not so wholly vile and sordid when it can throw up, even in these latter days, heroes whose names are "on fame's eternal bed-roll worthy to be fyled" along with those of "the patriot Tell, the Bruce of Bannockburn." Christian de Wet takes place side by side with "Wallace Wight." President Steyn is a modern Andras Hofer, while Botha and Delarey, in their heroic but vain endeavour to shoot back the invaders who kept coming like locusts over the veldt, recall the stirring memories of Leonidas and his immortal three hundred who strove but strove in vain, to stem the tide of Persian invasion at the Pass of Thermopylae. It is something after all to have lived in the same years as those simple burghers, who in the high places of their fight counted not their lives dear unto them so they might save their country from a foreign yoke.

It is a sight for sin and wrong

And slavish tyranny to see

A sight to make our faith more pure and strong

In high humanity.

Mrs. Browning in "Aurora Leigh" bids her downcast hero note that though the world be sad and ill, "the thrushes still sing in it," and in like manner we in the midst of this evil and adulterous generation may take heart on hearing the bugle note of Freedom sounding in the veldt.

But that is not the only reason for gratefully acknowledging the services of those men. Their struggle has given new ground of confidence to every small nationality in the world. It has given pause to advocates of conquest everywhere. And over and above all these general services to mankind they have conferred upon us of the Empire the greatest boon that lies in the lap of the gods. They compelled us to see our own folly, our own shortcomings, our ignorance and our arrogance, they have been the chastening rods with which we have been smitten for our healing and for correction by the all-father whose name is Love. Whether we shall profit sufficiently by the faithful chastisement which we have received at their hands remains to be seen. That rests with us. They at least have discharged the duty laid upon them with intelligence and with zeal.

PROPHYLACTIC INOCULATION.

The proposal of the Punjab Government to make a serious attempt to stem the course of plague by widespread inoculation, should that disease unfortunately become prevalent again during the coming cold months, is considered by "*The Hospital*" to be a policy of despair and a drift in modern medicine. "*The Hospital*" observes:—

Vaccination against small-pox stands on a different footing. Not only is the process peculiar to itself, but so also is the certainty of its effect. Moreover, the virulence of the disease against which it is protective, and the readiness with which that disease attacks all sorts and conditions of men, practically irrespective of their surroundings, would drive us to accept vaccination even were it attended with far greater risks than in fact it is. But the proposal to use inoculation as a means of obtaining protection against enteric fever, a disease the connection of which with sanitary defects is well recognised, is quite another affair, as also is the proposal to obtain immunity in the same way from such a disease as plague, one which while running riot among people whose habits encourage the access of the germ, hardly touches those who are able so to arrange the manner of their lives, the nature of their clothing, and the condition of their dwellings as to escape infection. To attack the evil consequences of insanitary living instead of meeting the difficulty by raising the standard of existence, is distinctly retrograde from an evolutionary point of view. We lay stress upon this point because there are at the present time indications of a considerable willingness to fly to these methods as short cuts to immunity, far easier to follow than the straight and narrow path on which sanitary progress has to plod along, and more especially because it has recently been stated that should this wholesale inoculation prove successful it will at once place this measure on a par with vaccination as the only practical method of dealing with a widespread epidemic manifestation of plague, a statement of far too serious a character to be passed over without comment."

INDIAN WOMEN AS THEY STRIKE AN ENGLISH WOMAN.

The first thing, says sister Nivedita, in the course of an article in the *Brahmacharin* to strike the European eyes in oriental life generally is its likeness to the scenes and incidents depicted in the Bible. Unfortunately most Europeans after being puzzled by this for a while, "give it up" and never think of it again. Had they pursued the subject, they would have come upon interesting discoveries. The East is one, in a sense in which the West is not; and these women for instance, so like Rebecca and Birth and Mary, are indeed their actual sisters. The whole aim of their education is un-European, for we must not allow ourselves to suppose that the Eastern woman has no education. Far from it. That calm dignity in meeting strangers, that perfect poise in embarrassing situations, that gentle depth of eternity, that quiet skill in cooking and caring—all these things were not acquired haphazard. Neither were they imparted in classes given at definite hours by definite persons. Better than this, they are the web of the national life, mind-stuff and thought-stuff of every household routine. No woman would find it easy to tell us where she has learned most, whether in his father's house, from her mother-in-law, or by her own efforts in the inner recesses of her own heart. Our language teaches us much that we could never describe. The very story of Savitri is an education. It may be indeed that the two great educational factors in a Hindu woman's life are the influence of home and the atmosphere of the Ramayana and the Mahabharata. Every type, every ideal, adds its quota, but these are probably chief. The result diverges widely from the European product. It is for the Western women to enjoy, to possess, to dominate, yet one sometimes thinks that the oriental woman enjoys more. Her happiness is quieter, but it is obviously independent of any alteration of her circumstance. And the gentle humour of Eastern people is a further witness to its depth. One is perhaps justified in saying that the strongest difference between the East and the West is this that the East has greater power of enjoyment. The scope of pleasure is more limited. It is confined more or less strictly to the family or the village.

In this lies a contrast. But it is often at least as intellectual. It is true, the intellectuality of the one deals with *vairagya* and *multti*, while the other discusses Byron and Shelley. Which is the greater emancipation of the mind? It would not even be fair to say that the European woman has more common sense or business faculty than the Hindu. For, Indian woman in this respect can

only in Europe be compared to the French. During the war of Napoleon they developed a great capacity for the management of trade and agriculture, which they have never lost. The French woman has ever since been to some extent her husband's partner. And was it not of an Eastern woman that it was said, 'the heart of her husband may safely trust in her'? When we compare the Indian widow with the Western, we are struck by the fact of the difference of aim. It would appear that the Hindu woman's life seeks objects not within the sphere of things. Gravity, recollectedness, withdrawnness and a stern self-mastery,—such qualities as these make up the whole that we know as religious. And for my own part I read in the demeanour of every Indian woman the secret that makes her country the mother of religion.

NEWSPAPER CRITICISMS OF PUBLIC MEN.

The *Arena* seems to have asked a number of public men to give it their opinion on the above subject, and the replies are commented upon in an article in the September number. The general feeling seems to be that newspaper criticisms of public men have become intolerable. Some of the gentlemen addressed are even afraid to say so, and "decline to go on record in denunciation of this patent and growing evil." A public servant is a legitimate subject for public consideration and examination, and just criticism of public men and public measures is a necessary condition of efficiency in all the activities of a free people. But a clear line must be drawn between just and unjust criticism, between the rights of free speech and unbridled license. The excesses of the American press in criticising public men have become a national shame and many of the best men in the land, and the most successful men of business who are anxious to serve the public for a season, are however afraid to do so lest they should be subjected to the most merciless and unscrupulous abuse of the press. The position is neatly hit by a divine:

"The indiscriminate criticism and abuse of public men cannot be too severely reprehended. It lowers the tone of the press, and is destructive of public morals. Many good men are deterred from entering the political life out of personal, family, social, and business considerations, which have arisen from a justifiable fear of the reckless attacks that may be made upon them. Sensitive natures, although conscious of high moral rectitude, will thus shrink from serving the people. Freedom of speech does not mean lawlessness of the tongue, nor freedom of the press, calumny of the pen."

THE VALUE OF COAL-TAR.

To many outside the industrial and scientific world, is perhaps not known the immense value of coal-tar. It is a by-product in the manufacture of ordinary coal-gas and is a wonderfully complex substance. No less than 60 different substances have been discovered in it and every year scientific research discovers more. A writer in *Science* *Siftings* gives an interesting account of some of the substances hitherto discovered in coal-tar.

SOME WONDERFUL COLOURS.

One of the most interesting of these is benzene — a clear, mobile liquid discovered in gas oils by Michael Faraday in 1825.

It is used in enormous quantities for the production of aniline, and also of a powerful perfume known as artificial oil of bitter almonds, or essence of mirbane. No less than 150 tons of this perfume are used in scenting soaps and other toilet requisites. Benzene has the useful property of dissolving fats, resins and indiarubber, and is therefore of much value in the cleansing of goods by the dry cleaning method, and also in the forming of indiarubber solution, so well known to lovers of the cycle.

Anthracene was originally considered a useless by-product, and sold at a few shillings a ton, but quickly rose in price and shortly after the discovery of its value commanded something like £100 a ton. Phenol, or carbolic acid, discovered by Mitscherlich in 1834, being one of the most powerful antiseptics and disinfectants, purifies the atmosphere from noxious gases and destroys the infectious germs of disease. From carbolic acid is obtained a valuable series of colouring matters, ranging from a beautiful yellow (picric acid) to reds, oranges, browns, and many other colours.

The wonderful substance, aniline, is found only in small quantities in coal-tar, and its production on a sufficiently large scale for industrial purposes only became possible when Zinin, in 1842, showed it could be made from nitro-benzene. All the aniline for the production of innumerable beautiful colours is obtained from this derivative of benzene.

TALES OF TENNALIRAMA.

By Pandit S. M. NATESA SASTRI.

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In 1856 Dr. William Perkin was engaged experimenting on aniline with a view of making an artificial quinine. Though his experiments in that direction were a failure, they were the means of his making the great discovery of the first aniline colour, namely, mauve, and from these experiments has arisen a world-wide industry. In 1858, Professor A. W. Hofmann discovered the magnificent colour magenta, or aniline red, one of the most brilliant colours known to the dyer. Then came in quick succession greens, violets, blues and yellow colouring matters, all the hues of the rainbow, and at the present day the number and varieties of colours are bewildering.

SOME USEFUL DRUGS.

We are indebted to coal-tar not only for beautiful colours, but also for some of our most valuable drugs.

Antipyrine, discovered in 1883 by Dr. Knorr, of Erlangen, is considered even better than quinine as an assuager of fevers, and is much cheaper in price. Another drug discovered by Skraup, has the special power of mitigating yellow fever, or the "yellow jack," the dread of every tropical colonist. Phenacetine is still another, possessing valuable antipyretic properties. Sulphonal, discovered by Professor Baeyer, is a wonderful sleeping potion. But perhaps the most remarkable substance obtained from tar is saccharine, 220 times sweeter than cane-sugar, useful for sweetening fruit preserves, Jams, Jellies, etc., where ordinary cane-sugar would go mouldy and ferment in course of time. It does not nourish and fatten the body as cane-sugar does. Hence it is of value in certain troubles like diabetes, where it is often recommended by the physician for sweetening tea or coffee in place of cane-sugar.

Vanillin, now obtained from tar, is a delicate flavouring essence resembling the true vanilla from the vanilla bean. By mixing essence of mirbane with a certain proportion of coal-tar vanilla, Professor Roscoe has prepared a delightful perfume known as white heliotrope, and many of the pleasant perfumes which play an important part in the toilet of every pretty maiden and courtly dame are extracted, by the magic of chemistry, from that black and ill-smelling substance, tar.

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GROWTH OF URBAN POPULATION :—A SIGN OF INDUSTRIAL PROGRESS.

A memorandum by Sir Alfred E. Bateman, K. C. M. G., on the comparative statistics of population, industry, and commerce in the United Kingdom and some leading foreign countries was published last month as a blue-book of which a summary appears in the *British Trade Review* of last month.

Sir Alfred Bateman has elected to consider the subject on the proposition that the basic foundation of the trade and industry of a nation is fixed upon the proportion of its industrial population. He shows that since 1871 the rate of increase in the growth of population has been about 1 per cent. in the United Kingdom, practically nil in France, appreciably over 1 per cent. in Germany and over $1\frac{1}{2}$ per cent. in the United States. He observes :—

The special importance of these figures in connection with the subject of this memorandum does not appear to arise so much from a greater rate of growth in Germany and the United States than in the United Kingdom, though that greater rate of growth must necessarily have had its influence on the industrial progress of those countries, as from the fact that the rate has now to be calculated on a mass of population largely exceeding that of the United Kingdom. As a fact the addition to the population of the United States in the thirty years approaches in absolute numbers the total population of the United Kingdom at the present time. The change in relative population must largely affect all commercial comparisons.

He shows by evidence that a steady and irresistible process of metamorphosis is taking place in the population of Germany, the United States, and in a smaller degree that of France, in which these agricultural populations are gradually merging into those devoted to manufactures. He goes on to point out that in all four countries the increase has been chiefly in the Urban population.

In absolute numbers the increase in the town population, both in Germany and the United States, is beginning to be greater than can be the case in the United

Kingdom. In Germany the increase in thirty years is $15\frac{1}{2}$ millions, and this exceeds by $5\frac{1}{2}$ millions the total increase of the population of the United Kingdom in the interval, so that, even allowing for a transfer from rural to urban in the United Kingdom, the absolute increase of the numbers of the urban, and we may reasonably assume of the commercial, manufacturing, and industrial population in Germany has probably been somewhat greater than in the United Kingdom. As to the United States, there can hardly be any question. The increase of 17 millions in the town population of the United States between 1870 and 1900 exceeds by seven millions the total increase of the population of the United Kingdom in the same period, and the transfer from rural to urban with us cannot have been anything like that figure. In other words both Germany and the United States have attained to the position of increasing their non-agricultural population more quickly than the United Kingdom, and, looking at the larger mass of the population in both countries and their rapid rate of growth, there seems no doubt that unless something happens, which does not seem probable, to make people go back to the land, both Germany and the United States will in a short time possess a larger non-agricultural population than we have, and one which will increase more rapidly in numbers.

The effect of this increase in town population on industry and commerce is thus described by Sir Alfred Bateman :—

The increase of population in Germany and the United States has recently been greater than the increase in the United Kingdom, and those countries have rapidly developed manufacturing and industrial power. As with ourselves, so with those countries, the set of population has been to the towns; necessarily, therefore, there has been a more vigorous search than formerly for an outlet for the power above referred to. We are still ahead of either country in our power of manufacture for export, but beginning from a lower level, each country is travelling upwards more rapidly than we are who occupy a higher eminence. If peace is maintained both Germany and the United States are certain to increase their rate of upward movement. Their competition with us in neutral markets, and even in our home markets, will probably, unless we ourselves are active, become increasingly serious. Every year will add to their acquired capital and skill and they will have larger and larger additions to their population to draw upon.

MOHAMED : THE PROPHET OF ISLAM.

To the latest number of the *Madras Review* Mr. Mirza Hashem Ispahani contributes an article on this subject. He gives an interesting account of the sufferings and trials undergone by the founder of Islam. Speaking of the religion of Muhammad, the writer says :

There is nothing mysterious in it. It is itself averse to being concealed under any mask. All the Islamic traditions are open to the free judgment of every person as well as for free inquiry and investigation, and the Moslems are at liberty to reject entirely all such traditions which according to their free judgment prove themselves contrary to nature and reason. But there is no such liberty granted to other religions. Not even the grandest, and indeed the main principle of Islam—the existence of God and His unity—is required by Islam to be blindly and slavishly accepted. For the sake of a contrast, we may be permitted to refer to the mysterious doctrine of the Trinity, the foundation of Christian belief. All Christians declare that notwithstanding that this dogma is wholly opposed to nature and reason, it must be blindly believed in, all exercise of reason being doggedly interdicted.

Mr. Ispahani further observes :

Nothing can be simpler or more in accord with the advance of the human intellect than the teachings of the Prophet of Islam. The few rules for religious ceremonial prescribed for Moslems are chiefly with the object of maintaining discipline and uniformity so necessary in all stages of society ; and even the rules are not of an inflexible character. The Moslems are allowed to break them under certain circumstances, as in sickness &c., &c. Intoxication and gambling, the curse of other communities and the bane of all uncultured and inferior natures, are rigorously prohibited. The wisdom which incorporated into Islam the time-honored custom of annual pilgrimages to Mecca has breathed into it a freemasonry and brotherhood of faith, in spite of sectarian divisions. The eyes of the whole Moslem world fixed on that central spot keep alive in the bosom of each some spark of the celestial fire which lighted up the earth thirteen centuries ago.

Mr. Justice Syed Amir Ali rightly says :

"Of all the religions of the world that have ruled the conscience of mankind the Islam of Mohamed alone combines both the conceptions which have in different ages furnished the mainspring of human conduct—the consciousness of human dignity, so valued in the ancient philosophies, and the sense of human sinfulness so dear to the Christian Apologist. The belief that man will be judged solely by his actions throws the Moslem on the practice of self-denial and universal charity ; the belief in Divine Providence, in the mercy and love and omnipotence of God, leads him to self-humiliation before the Almighty and to the practice of those heroic virtues which have given rise to the charge that "the virtues of Islam are stoical" patience, resignation and firmness in the trials of life. It leads him to interrogate his conscience with nervous anxiety, to study with scrupulous care the motives that actuate him, to distrust his own strength and to rely upon the assistance of an Almighty and All-Loving Power in the conflict between good and evil."

UMA.

Mr. Romesh Chunder Dutt gives in the latest number of the *National Magazine* a metric version of the description of *Uma* given in the first canto of Kalidasa's *Kumara Sambhava*. It may be noted that the beauty and loveliness of *Uma* is a favourite subject with all Indian poets and the following rendering of a few verses relating to *Uma* will also give an idea—though very faint—of the richness and melody of Kalidasa's poetry.

1.

Youth disclosed a woman's beauty,—
Nature's graces void of art,
Wine's sweet langour void of madness,
Love's soft glamour, not its dart!
And as painter's pencil traces
Blushing bloom of brow and face,
Soft as sunbeams ope the lotus,
Youth disclosed fair *Uma*'s grace!
From her feet bright tints of crimson
Seemed to drop at every pace,
Lotus waved by gentle zephyrs
Move not with a softer grace!
And her anklets sweetly tinkled
As the princess walked in state,
Amorous white birds caught the music,
Uma learnt their graceful gait!

2.

Soft the blossoms of *Sirisa*,
Softer *Uma*'s rounded arms,—
Were they chains young Love had fashioned
For the God who owned her charms?
On her neck and swelling bosom
Hung the pearls in graceful cluster,—
Did they lend her brighter beauty,
Did her bosom lend them lustre?
If the lotus ope its petals
In the beauty of the night,
Moon-lit blossoms then might rival
Uma's face serene and bright!
If the jasmine bloomed on coral,
Pearls on rosy leaf were set,
Uma's red lips, teeth of whiteness,
Nature then might imitate!

3.

And when from those red lips issued
Voice of music, sweet and clear,
In the woods the startled "Kokil"
Hushed his lay that voice to hear!
And her glances! Did the wild deer
Learn the dark charm of her eye,—
Did she from the deer of forest
Learn that secret mystery?
Arched eye-brows darkly shaded
Thrilled the gazer's beating heart,—
Were they young Lover's bow of prowess
Quick to send the fatal dart?
Fairest forms and shapes in nature,
Richest tints in softest shade
Were in harmony united
To create this Mountain-Maid!

DAMAYANTI TO NALA.

(IN THE HOUR OF EXILE.)

(Dedicated to the Sweet Dreamer of Santa Croce.)

Shalt thou be conquered of a human fate,
 My liege, my lover, whose imperial head
 Hath never bent in sorrow of defeat?
 Shalt thou be vanquished, whose imperial feet
 Have shattered armies and stamped empires dead?
 Who shall unking thee, husband of a queen?
 Wear thou thy Majesty inviolate!
 Earth's glories flee of human eyes unseen,
 And kingdoms fade to a remembered dream;
 But henceforth, thine shall be a power supreme,
 Dazzling command and rich dominion,
 The winds thy heralds, and thy vassals all
 The silver-belted planets and the sun.
 Where'er the radiance of thy coming fall,
 Shall countless forests and unnumbered waves,
 And mountain-multitudes bow down thy slaves;
 The dawn for thee her saffron foot-cloths spread
 Sunset her purple canopies, and red
 In serried splendours; and the night unfold
 Her velvet darkness wrought with starry gold.
 For kingly raiment. Love, this hollowed palm
 Shall be thine amber cup to proffer balm,
 Wild honey and sweet foam of welling streams
 Mine eyes thine onyx lamps to light thy dreams
 Upon my bosom soft as cygnet-down.
 My hair shall braid thy temples like a crown
 Of sapphires, and my kiss upon thy brows
 Like-cithar-music lull thee to repose,
 Till the sun yield thee homage of his light.
 O King, thy kingdom who from thee can wrest?
 O Love, who dares uncrown thee from this
 breast,
 • The citadel of Love's enchanted realm—
 What fate shall conquer thee, what gods
 o'erwhelm,
 O god-born lover, whom my love doth gird
 And armour with impregnable delight,
 And Hope's triumphant, keen, flame-carven
 sword.

The Indian Ladies' Magazine. SAROJINI NAIDU.

THE INFLUENCE OF DANTE ON ART.

Mr. Addison McLeod writes an article in the *Art Journal* for September on "The Influence of Dante on the Art of his Century," in the course of which he says: "To all who know anything of Tuscan art, the names of Cimabue, Giotto, Orcagna, are household words. Yet the ideas connected with them are apt to be merely scattered and vague, or else the over-emphasised perceptions of some strong mind which has made one of them its especial study. Let it be allowed us to particularise in a general way. Cimabue was a painter of purely religious pieces, with no attempt at naturalism, but a very definite seeking after beauty. Giotto was both much wider in scope, and intensely realistic in aim: striving by all his powers—imperfect though they were—to paint life as it is. His symbolism, when it comes, is plain and direct, usually expressed in single figures. Next after him comes Simone Memmi. He has made no advance as a craftsman, and has only become more introspective and thoughtful. Then comes the period with which we propose to deal. There is a spirit very clearly visible to the visitor in Florence and though he may connect it with no very definite time, he does with one name, *viz.*, that of Orcagna. It is a spirit, suggestive but unmistakable; betrayed rather by change of mood than change of subject, though it has to a large extent introduced, instead of the painting of life actual, the symbolical treatment of all that connects it with things beyond. Even subjects of a more ordinary kind, however, are given a mystic turn. We notice strange beasts about the fringes of the picture, stray uncouth demons intruding here and there, giving us the feeling that there are gentlemen of their kind in abundance lurking outside. What is the cause of this new and hardly wholesome atmosphere? Where are we to realise it? Whence are we to trace it. As an artistic influence, how admirable is it?" These are the questions investigated in the article.

DEPARTMENTAL NOTES.

Educational.

PROFESSOR DEWAR ON EDUCATION.

In his Presidential address at the British Association for the advancement of Science at Belfast, on the 10th Professor James Dewar launched a startling indictment of our technical educational system. The sum of the case made out by Professor Dewar may be stated in a few sentences from his speech, as follows: Our backwardness is an extraordinary and disastrous phenomenon. In a word the explanation is want of education among the so-called educated classes; and, secondarily, among the workmen on whom those depend. The failure of our schools to turn out and manufacture to demand thoroughly trained men explains our loss of valuable industries. The really appalling thing is that we are two generations behind Germany. Germany has a commanding advantage because she turns out an abundance of men of ordinary plodding ability thoroughly trained and methodically directed. Technical training cannot remedy this deficiency, for mental habits are formed for good or evil long before men go to Technical Schools, and we must train the population from the first to think correctly and logically and to deal at first hand with facts. The Professor selected chemistry for special illustration. Last year 4,555 trained chemists were employed in German works as compared with 1,700 employed twenty five years ago. A liberal estimate of the chemists employed in works in the United Kingdom places the number at 1,500. Again, German chemists are as superior to us in technical training as in numbers. Of German chemists 84 per cent. have received a thoroughly systematic and completed chemical training, and 74 per cent. a University education. Of British chemists, on the other hand, barely 21 per cent. are graduates and only 10 per cent. hold College diplomas. "Our deterioration is all the more remarkable in view of the fact that the fundamental discoveries upon which Germany's gigantic chemical industry is built, were made in England; and that reminds us that in all educational matters it is the averageman whom we have to consider and average ability which we have to develop." He regrets that the late Prince consort's advice, given forty-three years ago had not been more seriously adopted. The Prince hoped that the public in general and the Legislature and state in particular, would more and more recognise the claim of science, which was an ele-

ment of strength and prosperity, and the protection of which was demanded by the clearest dictates of self-interest.

PROF. ARMSTRONG ON EDUCATION.

At the British Association Meeting on the 11th, Professor Armstrong's address as President of the Engineering Section dealt a heavy indictment against our educational system using the following points as his text. Educational affairs are in a state of chaos; the reformer's way is blocked at every point; our educators have ceased to be practical; school boards have done admirable work, but in some respects have been disastrous failures. The prevailing tendency, he declared, is to imitate rather than to originate. The burden of Empire our nation bears is of appalling magnitude, and men who have imaginative power are aghast at the flippant unconsciousness of the responsibility manifest in the public at large, and even in the majority of our statesmen and politicians. Our Education department must be reorganised root and branch. We are steeped in mediævalism and need some cataclysm to sweep away preconceived opinions.

THE NRISIMHAPRASAD HARIPRASAD BUCH
METAPHYSICS PRIZE.

We are requested by the Secretary to the Central Hindu College Committee to announce that the subject for this year's thesis is "The Philosophy of the Puranas—to be worked out in one or more of the 18 Puranas." Further particulars may be had of the Principal, Central Hindu College, Benares.

UNIVERSITIES AND SCHOOLS.

Principal Hopkinson, distributing prizes at Macclesfield Grammar School said he, for one, felt it was impossible to carry on the work in the Universities with anything like success unless they were in very close relationship with secondary schools. They wanted their Universities to be influenced by the experience and knowledge of those who had been directly engaged in secondary education, in training the boys some of whom would pass on to the Universities; and, on the other hand, the Universities would be glad if they could exert an influence on the secondary schools, whose methods had to be tested by the work their students did in the Universities. He thought sometimes the Universities might give valuable hints to the secondary schools on the subject of teaching and preparing for the Universities.

Literary.

ROBERT LOUIS STEVENSON.

The following is a summary of a lecture on Stevenson delivered recently by Mr. A. L. R. Thornton I.C.S., at the St. Joseph's College, Trichinopoly.

Mr. Thornton said that he chose the subject of Stevenson for his address because to his audience who were mostly young, whose impulses were generous and true, and whose ideals were pitched high, no better writer than Robert Louis Stevenson could be placed as a model for life. Stevenson no doubt attracted all by his magnetic personal charm, and magnificent style which carries the reader headlong. The secret of his glamour however lay deeper. "No man can do as well as he teaches. We are all like St. Paul in this, that we see better things than we are able to attain to; we cannot therefore hope to be seen doing what we teach, but we must be seen trying to do it; we shall ever only teach well, in so far as we are trying hard; the man who only talks, I pledge you my word, he will not even do the talking well." Stevenson's message rings true, because he courageously carried out what he taught. The keynote of his life was to be useful. To lend a help to mankind as mankind had lent out of its treasure a help to him, and who did not have this ideal, Stevenson regarded as irremediably base. Stevenson's life was throughout a continuous struggle against physical distress in some form or other. Indeed the days were few in which he was not the victim of some malady, but despite all this, he went on pursuing his literary career with a courage and endurance worthy of imitation. To him, the medicine bottles on his chimney and the blood on his handkerchief were always only accidents, and did not in the least color his view of life. Even at his worst he always held that any brave man might make out a life which should be happy for himself, and by so being beneficent to others. On one occasion when he had a violent hemorrhage, he took pencil from his wife and wrote "If this be death, it is an easy one; don't be frightened," and then measured his medicine. The motto of his whole life may be summed up in words he once used himself. "We have only to trust and do our best and wear as smiling a face as possible, for others and ourselves." "For all time," observed Mr. Thornton, "the example of his life will be a beacon more brilliant than any of his forefather's lighthouses to guide the weary mariner who is making shipwreck on the sea of life to the still waters of what he loved to call the quiet mind, and to inspire him to follow in his steps." Stevenson's

teaching falls into two divisions, a man's duty to himself and his duty to his neighbour. "I want you to be very stern with yourselves. Justice is for one's self; love for others." "One person I have to make good, myself. But my duty to my neighbour is much more nearly expressed by saying I have to make him happy, if I can." "Gentleness and cheerfulness, they come before all morality. They are the perfect duties." This, said Mr. Thornton, is the kernel of all his teaching. Life is a constant battle; a man's first duty is to see that he never abandons the struggle. Constant falls must be. That was the burden of Stevenson's writing. The battle may seem to sore against us; our frailties may appear invincible and our virtues barren. But we must never despair or abandon the struggle. All life is service. The very length is something, and it must be our business to reach the hour of separation and be honoured. "To travel hopefully is a better thing than to arrive and the true success is to labour." To scramble through this random business with hands reasonably clean, to have played the part of a man or woman with some reasonable fulness, to have often resisted the diabolic and at the end to be still resisting it, is for the poor human soldier to have done right well." Never to yield was the great moral of Stevenson. Stevenson's idea of man's duty towards his neighbour he expressed clearly from his earliest day. It was not enough to play the Pharisee. "Acts may be forgiven,—not even God can forgive the hanger-back." In 1880, he wrote to his mother "It is much more important to do right than not to do wrong, further, the one is possible, but the other has always been and ever will be impossible, and the faithful design to do right and to love one's neighbour as oneself is the law of God. We are not damned for doing wrong but for not doing right." Mr. Thornton concluded his impressive lecture with an eloquent exhortation that the story of Robert Louis Stevenson—the true knight of unselfishness and self-sacrifice may way and influence their whole lives.

TOLSTOY'S FORTHCOMING WORK.

The St. Petersburg correspondent of the *Daily Mail* gives an interesting account of the new romance upon which Count Tolstoy is at present engaged. The plot is laid in the middle of last century at the time when Russia was involved in an obstinate struggle with the warlike mountain tribes of the Caucasus. The hero of the tale is one of the chief allies of the celebrated Schamyl, one Hadshi-Murat, who at that time played a distinguished rôle as leader of the mountain tribes. At the beginning of the fiftieth year Hadshi-Murat surrendered to the Russians, and was treated with kindness during his captivity in consideration of his bravery. But homesickness and the pangs of conscience drove him back to the mountains, where the tribesmen beheaded him because they imagined he had betrayed them. This interesting character has been chosen by Count Tolstoy for his hero, and has united fact and fiction in an exciting and artistic whole.

Legal.

WHAT IS A BANK?

This is not quite so difficult as the legal conundrum regarding the precise nature of a "place": and the Court of Appeal in Ireland, *In re Shields' Estate* ([1901], 1 L. R. 172), have answered it by virtually saying that a *gombeen* man (a country money-lender) may be a Bank if he is big enough. Shields carried on business as a money-lender in County Tyrone. In each of three towns in that county, he had two rooms in a house, where he attended one day each week. He lent money on promissory notes, usually payable in twelve weeks, with interest at a halfpenny in the pound per week; and he made advances on mortgage. He was also in the habit of receiving large sums on deposit, for which at one time he gave promissory notes; but since 1893 he had substituted for these notes deposit receipts, practically in the same form as those issued by ordinary banks in Ireland. His operations in these directions were very large, running up into many thousands; but his book-keeping was described by experts as "primitive." He never issued notes, cheque-books, or pass-books and none of his customers kept current accounts. He himself had an account with the Bank of Ireland, from whom he received advances, and deposited title-deeds by way of security. In 1899, being embarrassed, he executed a trust-deed in favour of his creditors; and in subsequent proceedings to wind up his estate, the question arose whether the Bank of Ireland were to be held secured creditors by virtue of the deposit of deeds, or to stand on the same footing as ordinary creditors. And the answer depended on whether Shields was a banker or not: for an Irish statute of the eighteenth century (33 Geo. II, c. 14, Ir.) provided that such mortgages or charges should, if made by a banker, be "levelled" in favour of his general creditors, unless the mortgage or charge in question had been registered.

The Court had therefore to address itself to the abstract question: what is the essence of banking? It was strongly pressed in argument that this consisted in what Counsel called "the banker's contract"—the obligation to honour a customer's cheques and the practice of doing so: and it was therefore said in effect that there could be no banking without a system of current accounts. Ross, J., held in favour of this view; but the Court of Appeal thought otherwise. The essence of banking, they said, is that a man should traffic with the money of others for the purpose of making profit. If he keeps open shop," said Fitzgibbon, L. J.

"for the receipt of money from all who choose to deposit it with him: if his business is to trade for profit in money deposited with him for that purpose, he answers the description of a banker."

The case is interesting in an academic way, but exactly similar facts could obviously occur but seldom. The practical question, as to where the money-lender ceases and the banker begins, is evidently left to be answered as a question of fact in each case. In *Exp. Coe* (3 De G., F. & J. 335), a dictum of Turner, L. J., certainly lent some colour to the contention that cheques and current accounts were necessary incidents of banking: "even that branch of the company's business which has most resemblance to banking differs materially from the ordinary business of bankers, for the company did not honour cheques payable on demand and drawn upon themselves." The "current-account" test would certainly be a more convenient criterion than the comparatively vague test laid down by the Court of appeal. *The Law Magazine and Review*.

HON. J HAY BROWN, ON THE SUCCESSFUL LAWYER.

Who is the successful lawyer? What is his correct standard? It is not merely the gathering of clients about him and the winning of their causes. It is not the accumulation of wealth, nor the exercise of power, nor is it eminence in public station. These are not to be disregarded or lightly considered; for in the fulness of time they may come to be the legitimate evidence of a well-rounded career strenuously, faithfully and persistently pursued, and crowned with triumph. The successful lawyer, to whom come public confidence and esteem, honor and respect among his fellows, renowned as the friend of right and the foe of wrong, competence to his household and peace to his conscience, is he who is loyal to his high profession, who knows that it stands for the administration of justice upon the earth; who feels that, above all other considerations must be his sincerity and zeal in the work he has undertaken; who pleads for no man's cause that is not just and defies the world for him whose is; and who with clear and intelligent comprehension of the great principles of truth and right, helps to make more enduring the foundations upon which society and good Government rest. It was of such a lawyer that Mr. Webster spoke when he said: "Justice is the greatest interest of man on earth. It is the ligament which holds civilized natures and civilized beings together. Wherever her temple stands, and so long as it is duly honored, there is a foundation for social security, general happiness and the improvement and progress of our race; and whoever labors on its edifice with usefulness and distinction, who ever clears its foundations, strengthens its pillar, adorns its entablatures, or contributes to raise its dome still higher in the skies, connects himself, his name and his fame and his character, with that which is, and is bound to be, the frame of human society."—*The Law Student's Helper*.

Trade and Industry.

INDIAN TANNERS *Versus* AMERICAN.

"A Madras Tanner now in London," writing in the *Madras Mail* about the question of enabling the Madras tanner to resist American competition and thereby preserve his trade which is being quickly ruined, makes the following suggestion :

The natives of India suffer from natural ignorance, and in order to bring back their ever decreasing trade, it is imperative that the Western processes be taught them. This can only be done by Government Technical Schools and by employing Europeans or Americans, who have had considerable practical experience in the trade, to teach the natives. The question of finance is an important one, and sufficient encouragement may not be had at the hands of the Government, but in view of the possibilities of benefiting a large community and promoting local industry, the Government ought to see the advisability of such expenditure. The education need not be free, as those who would learn, would come from fairly wealthy circles, and the income derived from the fees charged to such students would, to some extent, lessen the drain on the Government. And later on, when the students have become tanners according to Western methods, they would need to import large quantities of chemicals and other necessities, upon which the usual Customs duties would be levied, thereby repaying to the Government the original cost of such technical education.

Comment on the above is unnecessary. When Government recognises that it has a duty in this respect and that duty is not to be met with an apology or a sigh, then it will be time to discuss the practicability of suggestions like the above. Meanwhile, it is satisfactory that public mind is gradually awaking to the true magnitude of the nation's need. India looks forward to a period when her affairs will be under the direction of a statesman who will disdain playing to the British gallery, and will, quietly and with determination, give his whole heart to the advancement of the Indian people.

The Lahore Tribune.

IMPROVEMENT OF INDIAN COTTON.

Discussing the much thrashed-out subject of the improvement of indigenous cotton, the *Rast Gofar*, in one of its recent issues says : "We believe that exotic seed suited to the soil is a necessity, and to buy that, the mill companies and the mill agents must tax themselves. To introduce and make that seed popular is the bounden duty of the Imperial Government, through the Agricultural Department. Of course it will require a staff of able and intelligent men with agricultural training, and to meet the expenses, Government would be perfectly justified in imposing a small tax on all exports of raw cotton. If the amount realized from the tax be appropriated for the improvement of cotton itself, we do not think the most methodical bigot of modern times, the Free Trade School, could accuse the policy as

one of protection. We may say in passing that protection itself, of indigenous industries, is now believed to be wholesome and necessary by sound economists of Europe.

THE INDUSTRIAL USE OF ALCOHOL.

Owing to the reasonable requirements of the German Excise Laws the industrial use of alcohol has increased enormously there of late years. Thus, up to 1887, the total annual consumption of alcohol for industrial purposes throughout the German Empire did not exceed 4.4 million gallons, says *Engineering*, whilst two years ago this figure had risen to 23 million gallons. German agriculture has benefited greatly. This great advance in the use of denatured spirit has received every assistance from the public authorities who in place of raising difficulties and suggesting at every proposed step the possibility of some trivial fraud on the revenue, as do those nearer home, have judged that the country would profit more, even from a mere monetary point of view, by the development of the industry than it could possibly lose, even if the excise requirements were so relaxed as to render possible an occasional trivial evasion of the regulations.

Regarding the matter from this point of view, the German Government awarded premiums for the production of denatured spirit, framed its regulations for the process of denaturation so as to give manufacturers in certain cases a choice in the kind of adulterants used, and put no obstacles in the free transport and sale of the denatured spirit. At the same time, every effort has been made by private individuals to cheapen the manufacture and distribution of the spirit, which is sold retail at the price of about 1s. 4d. per gallon, whilst in large quantities it can be obtained at a price of about 11d. per gallon.

The example set by Germany seems likely to bear fruit in France, where, during the last year or two, the matter has attracted much attention. Used as the working agent in an explosion motor capital results have been obtained, since, although weight for weight, alcohol has only about half the heating power of petrol, yet, according to Professor Musil a rather better thermodynamic efficiency is obtained, viz., about 24 per cent. as compared with one of 16 to 18 per cent. for a petrol motor, and of 18 to 31 per cent. in the case of an engine using lighting gas.

Using spirit alone, about nine-tenths of a pint are needed per horse-power hour, but in general it is found advisable to mix the spirit with benzine, in which case the cost of running is practically the same as with petrol.

Medical.**BOILED RICE.**

The rice should be boiled thoroughly done. A little cream added before it is taken off the stove gives it a richness and flavour. Boiled rice is at once the most nutritious and easily digested of all the cereals.

Rice should be used more than it is. Even an inferior quality of rice makes an excellent food if it is boiled properly. Rice could be used to advantage in place of potatoes, especially when potatoes are dear. Boiled rice can be served on the table exactly as potatoes are, and, like potatoes, it is excellent served with brown gravy and meat.

Our experience with rice, while a boy, was that it was a delicacy only to be eaten with sugar and cream. This is a great mistake. Rice ought to be used as freely and commonly as potatoes because from a nutritive standpoint its value is very high.

So much of the surface of the earth is so admirably adapted to the raising of rice that it will always be a comparatively cheap cereal. Rice contains about 80 per cent. nutrition, and properly boiled it will digest in an hour.

Considering its cheapness, digestibility, and nutritive value it easily excels any other food known to man. It is a surprising fact that it is not used more in this country. In the older civilizations it constitutes the principal food. In Egypt, India, and China the value of rice as a food is fully appreciated. In this country we have passed it by and continue to use more expensive and less nutritious food which is sometimes very difficult of digestion.—*Medical Talk, Ohio.*

FASTING.

The ancients as the saying goes, "knew a thing or two," and one need hardly be surprised that at a period when self-indulgence took its grossest forms, and when gluttony was the most popular of vices, those kindly saints who, though "dead on" heretics, did so much to encourage true believers in the paths of virtue should have invented fasting as a duty and a penance. As a weekly recurring duty fasting undoubtedly became a health-giving ordinance, while it had this great superiority over other forms of penance, that it generally left the penitent in better form than it found him. And therein lies its virtue now. We all eat more than we require, and this daily repeated superfluity lends to stodginess. In a more primitive state of society meals were more irregular, and the amount of food tallied more with the effort expended in obtaining it. Now we eat because it's a meal time; too many of us eat not by

rule, but to repletion; while probably all of us eat again before we are really hungry. Day after day a little more is taken than is used, and this excess either disturbs the liver, or teases the stomach, or circulating in a hyperplastic blood, leads to torpor, or sometimes is put by—out of harm's way for the time, but much to the distress of the patient later on—in the form of fat. Thus we never have an opportunity of striking a proper balance between intake and output unless we follow the wise maxims of the Church, and fast once a week, not merely abstaining from the more toothsome delicacies, but fasting honestly, even to emptiness and discomfort. Let us remember that speaking now not of invalids but of the healthy, there is probably no one who has not stored up in the various corners of his frame, sufficient food to keep him going, not comfortable, perhaps, but well, for at least two or three days, and that it is good for us to cultivate the habit of living on our supplies rather than trusting to a hand-to-mouth existence.—*Hospital.*

AFTER DINNER COFFEE.

The pleasant custom of taking coffee after dinner can show no adequate reason for its practice, says the *Medical Times*. It has been suggested that coffee tends to neutralise the effects of the alcohol that has been drunk, just as the custom of eating cheese aids the secretion of gastric juice and assists digestion. But on the contrary, tea and coffee retard digestion. The best suggestion in favor of coffee-taking as a wind up to a meal is that advanced by Sir William Roberts who questions whether this delaying effect may not after all be beneficial to digestion. He argues that the perfection of modern cooking tends to present us with our food in a condition which favors not merely rapid digestion, but too quick assimilation, a consequence which the ingestion of a retarding agent would tend to modify.

PINE-APPLES FOR DYSPEPTICS.

The partaking of a slice of pine-apple after a meal is quite in accordance with physiological indications since fresh pine-apple juice contains a remarkably active digestive principle similar to pepsin. This principle known as "bromelain" is powerful in its action upon foodstuffs and will digest as much as 1,000 times its weight within a few hours. The *Lancet* points out that its digestive activity varies in accordance with the diet. The fibrine of meat disappears entirely after a time. With the co-agulated white of eggs the digestive process is slow, while with the albumen of meat its action seems first to produce a pulpy gelatinous mass which, however, completely dissolves after a short time. When a slice of fresh pine-apple is placed upon a raw beef-steak the surface of the steak becomes gradually gelatinous owing to the digestive action of the active principle of the juice.

Science.

PROFESSOR JAGADIS CHUNDER BOSE.

Members of the scientific world everywhere have reason to thank Sir John Woodburn and the present Viceroy of India for the true insight which a couple of years ago, made them select Dr. Jagadis Chunder Bose, of the Presidency College, and send him to the Paris Congresses of Science as the representative of the Government of India.

During his absence from Calcutta, Professor Bose has proved himself in every way worthy of the confidence reposed in him. He has appeared in a prominent capacity at three different annual gatherings of the British Association, once as amongst the greatest living authorities on the phenomena that lie behind wireless telegraphy, and twice open up to new and unsuspected fields of research in physico-biological regions. He is at this moment bringing out, through Messrs. Longmans a work on "Response in the Living and Non-Living;" and no fewer than six different papers published in the course of two years, four by the Royal Society, one by the Linnæan, and one by the Royal Photographic—besides a noteworthy Friday evening discourse at the Royal Institution, have sufficed to establish his name as that of the discoverer and formulator of the new and important theory of stress and strain.

Plain folk to whom the jargon of Royal Society papers has little meaning, may be fully capable nevertheless of understanding and appreciating a novel scientific idea. And the doctrine of stress and strain, though enveloped by a cloud of witnesses in the form of more or less abstruse experiments, has the advantage of being in itself exceedingly simple. It is only its implications that are startling.

It has been found that the shock of any contact on living flesh produces an effect which may be detected and measured, by passing an electric current through the tissue at the same moment that the shock is administered, and allowing it to guide a writing point which is tracing a line. Under the influence of the blow, twist or other contact, electrical conditions are so altered that the line rises and falls, forming a curve in which we may read the full and detailed history of the shock. This curve is produced and bears an equal relation to the stimulus whatever was the form of the force impact—whether chemical, as by the application of poisonous or stimulating drugs, thermal, mechanical, or, as Dr. Bose has discovered, the stimulus of light. But it can be produced only so long as the animal substance remains alive. Let muscle, nerve or protoplasm once die, and it becomes thenceforth impossible to obtain, under any stimulation whatsoever, that subtle fluctuation of the interpenetrating ethereal occasion which betrays itself in the curve and is known as the electric response.

Hence this response has come to be regarded by biologists in general as the final and crucial "sign of life." An electric current sent through a living body is deflected by every stimulation of that body: the same current passed through dead tissue is deflected by none. The deflection, therefore, proves the reality of the mysterious entity known as "vital force," present in the one case and absent in the other. This simple syllogism was held to be entirely satisfactory until the experiments of the Calcutta Professor demonstrated the unexpected fact that even a steel wire exhibits the like antithesis of life and death! For it is now proved that metals respond to a blow or a twist; answer to changes of heat and cold; are stimulated by one drug, and poisoned by another, exactly like the animal. There are actually such things as living and dead wires. When the sewing machine is weary, it should be left to rest; when a piece of tin is hysterical, it may be smoothed by a caress.

The researches of Professor Bose have always been distinguished by a very special degree of thoroughness. It is owing to this quality that he has been able in so many cases to make subsidiary discoveries of vast importance. Such is the work which he has now done on electric response in common plants; on fatigue of substances; on the stimulus of light; and on the classification of metals. Perhaps few points amongst all these are of greater interest and utility than the fact that in studying the conduct of metals under drugs he has found quantity to have a determining effect on the result. A small dose of a given chemical may stimulate, when a larger would narcotise and a still further increase make again for exaltation. Hitherto, unfortunate humanity has had to offer itself as the field of experiment to his medical tormentor. With the appearance of tin and iron, however, as our possible substitutes, we have acquired the right to refuse this too aggressive phase of scientific ardour. Such a discovery forms a valuable contribution to the moralising of pathological science.

In fine, instead of hard and fast divisions between living and non-living, we are now compelled to regard all matters—whether animal, vegetable, or mineral, as, so to speak, "common stuff of the Cosmos," existing in the form of compounds which in the metals are perhaps simple and more stable, and in human muscle more complex and unstable, but which differ from each other ultimately only in degree. Upon this common stuff of the Cosmos again beat the waves of the great flood that is known as force which in its turn is one, whether it take the form of mechanical vibration, chemical activity, of heat, light, or electric radiation. For by the devious and difficult paths of Molecular Physics, Professor Bose has contended, and may be held to have proved, that a photograph is produced by a straining of particles which is essentially mechanical, that the sight of the eyes and the movement of the limbs may be regarded as electrical phenomena, and that even the anomalies of chemical science are probably to be explained by this theory of the fundamental unity of force.

In view of the brilliant and comprehensive character of this generalisation, the Government of India is to be congratulated heartily on its choice of a scientific deputation, and on the lustre which that deputation has cast upon its name.—*Statesman Cor.*

General.

RAM MOHUN ROY.

The following is the full text of the speech delivered by Mr. Romesh Chunder Dutt, C. I. E. in connection with a meeting recently held at Calcutta to celebrate the 69th anniversary of the death of Raja Ram Mohun Roy.

We are assembled here this afternoon to do honour to the memory of one, who was perhaps the greatest Indian of the Nineteenth Century, and one of the greatest men that ever lived in any age or country. We do ourselves honour by thus celebrating his memory year after year, and what is more, we derive courage and hope in our own work and endeavour in the present day, by the contemplation of the life and labours of such men as Raja Ram Mohan Roy. Nothing fills us with greater confidence in ourselves or with a higher faith in our future, than the contemplation of the long line of patriotic workers who have lived and died before us, but whose example is a burning and a shining light ever before us. It is in this light that I read *Modern Indian History*.—I read in it not merely the record of wars and conquests, but the more significant record of progress and reform silently achieved by our own countrymen,—of their great successes, and sometimes of their more glorious failures. That we stand on a higher platform to-day than we did a hundred years ago,—that we properly appreciate our own history, regard our own literature, understand and cherish our ancient religion, and seek for modern and enlightened forms of administration—is due to the labours of that long line of patriotic workers, the first and greatest of whom was Raja Ram Mohan Roy.

Gentlemen, this is not the time or the place for a detailed review of the life of that Great Pioneer of Progress. Briefly, his life, like the life of most true workers, divides itself into three distinct periods. In the first period, from 1774 when he was born until 1800 he was an earnest seeker after knowledge. How the bright little Brahmin boy learnt Bengali and Persian in his village home, how the earnest young man studied Arabic at Patna and Sanskrit and Vedanta Philosophy at Benares, how as a homeless wanderer he penetrated into Thibet to learn the mysteries of the Buddhist religion,—has been often told in accounts of his life. It is said that his thirst for knowledge nearly cost his life, and that he effected his escape through the kindness of a Thibetan woman, a kindness which he remembered to the end of his life. On his return home he began the study of English and other European languages and

nothing fills us with greater admiration for the wonderful intelligence of the wonderful man than the mastery which he acquired of the English tongue beginning after the age of twenty.

In the second period of his life, 1800 to 1813, Ram Mohun Roy was in the service of the British Government. Of this period little need be said; but when we recall the picture of the greatest man of India standing as a *Sheristadar*, before a recordless Assistant Collector in a remote District of Bengal, we can hardly repress a smile at the irony of fate. Not once or twice, but again and again in Indian History have the greatest of reformers lived the humblest of lives; the great Gautam Buddha begged his bread from door to door and the great Chaitanya was a wanderer on earth. And yet one cannot but feel a regret that the British Government did not honour itself by honouring such a gifted man as Ram Mohun Roy.

The third and last period of his life was the twenty years, from 1813 to 1833, which he passed after retirement from Government service. It is a period which most of us pass in idleness and repose; but in the case of Ram Mohun it was the period of his greatest activity and his highest glory. What he achieved in this period is recorded in the pages of Indian History, and will live for ever in the recollections of his countrymen. His lofty purpose, his high and many-sided endeavours, his indomitable determination, his high intellectual gifts and his sustained and patriotic labours fill us, after the lapse of 70 years, with amazement. He sought for and proclaimed the truths of Hindu Monotheism from the ancient *Upanishads* of India, he battled in the cause of social reforms against opposition which was almost overwhelming; he helped David Hare and Dr. Duff in promoting English education in India; he crossed the seas and laboured in England for the political advancement of his countrymen. The sight of such a man as Ram Mohun Roy was an object-lesson to Englishmen; Royalty received him with courtesy; the greatest men of England received him with open arms; the poet Campbell wrote of him; the antiquarian Rosen consulted him, the philosopher Jeremy Bentham addressed him as an *intensely admired and dearly beloved collaborator in the service of mankind*.

Gentlemen, I will not detain you any longer, as there are several speakers who will address you this evening after me. But I cannot conclude without pointing out to you one great gift which inspired all the works of Ram Mohan Roy, and which has animated all the great men of earth in all ages and all countries. Ram Mohan Roy

had faith in himself and faith in his country. Ram Mohan Roy had a determination which was indomitable, a persistence in the performance of his duty which would accept no defeat. Believe me, gentlemen, no great cause is served without this faith, this determination, this persistence. I have always held that it is better to fight for the righteous cause and to fail, than not to fight at all. But in the great problems which face us in the present day, it is not a question of failure, and if we are true to ourselves, and work with something of the faith and the determination of Raja Ram Mohon Roy, our cause—which is the cause of our motherland—is bound to triumph.

"THE COST OF THE INDIA OFFICE."

India contains the following under the above heading in bold characters in the beginning of the first page:—

There appears to be among Englishmen wide spread ignorance of the source from which the expenses of the India Office in London are provided.

Let us, therefore, call attention as prominently as possible to the fact that the tax-payers of India paid every penny of the cost of the buildings and of the site of this, our most magnificent Government Office, and that they and they alone have always paid and still pay every penny of its expenditure, from the salary of the Secretary of State to the wages of the charwomen.

The case of the Colonial Office is precisely opposite. The whole expense, initial and annual, of that Office has been and is borne by the British taxpayers.

The Royal Commission on Indian expenditure, notwithstanding the fact that it consisted chiefly of officials, unanimously recommended that this unfairness should be mitigated. But the recommendation was thwarted by the India Office.

We propose to go on repeating this statement of facts until they become familiar to English readers of this journal in reading rooms, clubs, and elsewhere. We commend it also to the notice of the justice-loving British Press.

• A GREAT GIFT TO THE EMPIRE.

Mr. N. M. Wadia, C.I.E., of whose munificence we spoke but a few days ago, has prepared, we learn, an elaborate scheme by virtue of which he proposes to give away his entire fortune in charity amounting to a sum which cannot be accurately estimated at the moment, but which will doubtless prove to be over half a crore of rupees. This, we presume, is the first instance in which a native of India has given away such a large amount at a single stroke. Mr. Wadia has

instructed his lawyers to prepare a deed of trust, the Trustees to be the Government of India and two gentlemen, to be named by Mr. Wadia. The amount which is invested mostly in Government securities and shares of the Bank of Bombay and similar concerns will be handed over to the Trustees, the principal to be kept intact and the interest to be utilised, at the discretion of the Trustees in relieving distress caused by famine, earthquake and similar natural calamities.

A separate trust will be made for the benefit of those now being supported by Mr. Wadia.

BRYAN'S OPINION OF MORGAN.

According to W. J. Bryan, J. P. Morgan is the most dangerous man in the United States. Bryan devotes some space in his editorial in endorsing the criticism of the German Emperor in his estimate of Morgan, and then goes one better. He says,

"The Kaiser is a discerning man. In a short visit with Morgan he found out what seems to be not apparent to many Americans, namely, that great financier is perfectly blind to the natural and necessary consequence that will follow his schemes. If Morgan were a philosopher or a student of human nature he would know that evil and only evil can follow from the monopolies which he has helped to organize. He is either without conscience or without judgment, or it is more charitable to take the Kaiser's view and consider him as incapable of seeing consequences far ahead.

"He is on a par with the drayman who starves his horse, or the farmer who impoverishes the soil, or the merchant who extorts from his customer, or the parent who allows his child to work in a factory when it ought to be in school, only he cannot plead necessity as an excuse.

"America has no foreign foe half so dangerous as Morgan and the plutocracy for which he stands. It would be fortunate for this country if all our people understood Morgan as well as Germany's monarch does."

GUARANTEED CURE.

After protracted and painstaking research, a thoroughly safe and certain Remedy has been discovered, which will positively Cure any Disease of the Nervous System. It is a sure Cure for Nervous Debility in all its forms, from whatever cause arising. Wasting Decay, Predisposition to Consumption; and I will send the prescription, and full particulars of the Remedy to any sufferer, on receipt of a self-addressed stamped envelope. Address: Rev. JOSEPH BORN, "St. Cloud," Westcourt Road, Worthing, England. (Name this paper).

THE INDIAN REVIEW.

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EDITED BY G. A. NATESAN, B.A.

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It may be stated that a page of the Review takes in about 730 words.

All contributions, books for Review should be addressed to Mr. G. A. Natesan, Editor, The Indian Review, Esplanade, Madras.

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IT is particularly requested that any change in the address of the subscribers may be early intimated. Complaints of non-receipt of particular issues of the Review received after the month to which they relate will not be attended to, and such, as well as old numbers of the Review will be charged for at eight annas a copy.

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The Government of India and the Report of the Indian Universities Commission.

The circular letter addressed by the Government of India to the various local Governments in regard to the recommendations of the Universities Commission gives hope that in so far as the Government of India is concerned it will not stamp its approval on all the objectionable recommendations of the Commission. It is something that "the Governor-General-in-Council disclaims emphatically any intention of receding from the policy set forth in the Educational Despatch of 1854 and affirmed by the Education Commission of 1882, and recognises" that it is important to encourage private enterprise in the matter of education, both because to do so shifts a larger proportion of the cost on the shoulders of those who should properly bear it and because private enterprise is peculiarly competent to adapt education to the varying needs and conditions of different places and different times. This policy was deliberately accepted at the time by the Government of India, and their adherence to it remains unshaken."

One of course has to be careful not to pin his faith too much on these high-sounding assurances. More solemn official declarations than these in regard to graver public questions have been conveniently forgotten in the past in the practical conduct of administration. But the native of India has often to live hoping against hope and in this particular case the future will settle how far his forebodings are true.

The recognition by the Government of India that the second grade colleges occupy a definite place in the educational machinery of the country and fulfil a useful function will certainly allay the popular alarm created by the sweeping recommendation of the Commission that these institutions should cease to exist hereafter. In regard to the levying of a compulsory minimum rate of fees in colleges the Govern-

ment of India repeat the old story but this time in more polished style. We have pointed out more than once that it is undesirable in the present circumstances of the country to insist on a compulsory minimum fee and we do not think that either the Universities Commission or the Government of India have made out a case for departing from the existing system. Nor do we think have the Government of India made any satisfactory pronouncement in regard to the proposed reform of Senates and Syndicates. We have still great reason to fear that the ultimate upshot of all these contemplated changes will be the *direct* officialisation of the Indian Universities. We say *direct*, because even as it is, in some of the Universities the *indirect* official influence is often considered intolerable and it may probably be worse in the future according to the proposed constitution.

The Educational Reform that is Really Needed.

After all we must confess that beyond making the Universities subservient to the Government the Universities Commission will not have achieved anything great or good which will tend to raise the quality and tone of education in this country. The grave evils of our present educational system arise chiefly out of the unsatisfactory condition of primary and secondary education and out of the enormous overcrowding in Schools and Colleges. Under the existing system it is impossible for the professor to bestow on his students that amount of personal attention which is absolutely necessary in the interests of true education. There is also the fact to be borne in mind that in many institutions and we are afraid the evil is at its worst in some of the ideal Colleges maintained by Government there is certainly not to be found now-a-days that amount of personal attention to students which was given by an earlier generation of teachers in charge of a fewer number of students. We must also own with great regret that in some Colleges there is the ten-

dency on the part of some members of the staff to fall into the already much condemned official vice of exclusiveness. Professors, at any rate some of them are not so easily accessible to students as was undoubtedly the case many years ago. These are grave evils which a peripatetic Commission travelling in special trains at more than ordinary speed cannot be expected to solve within a comparatively short space of time and alas! with a circumscribed knowledge of actual conditions.

Another great defect of our educational system is the absence of much of original research among the products of our University. Here again the defects of our educational system are chiefly to blame. Under the present conditions the student is compelled in the race for life to read a good deal that is good, bad and indifferent within a limited period and the only consolation is that he forgets with impartiality all that he has learnt—the good, bad, and indifferent. A thorough change in the course of studies is required and even if that were to be an accomplished fact, in the present peculiar conditions of the country where the class that is most assiduous in learning is not blessed with riches and where the recipients of university degrees are out of the bare necessities of life compelled to take up some employment or other, nothing but an adequate provision for advanced study could help the promotion of original research in India. For various reasons which are too well known to be repeated again, unfortunately in this country private munificence has not found its way into the field of education and though here and there we get a Tata still for a fairly long time to come, such help must come from Government. Will such help be rendered by it? And here we must remind ourselves of the fact that the Government of India in its latest circular referred to wants local Governments to report on “the likelihood of substantial contributions towards the advancement of higher education being forthcoming from private sources.”

The Indian Cultivator.

A *Pioneer* special telegram, dated London, 31st October, says that the Indian Famine Union, in a further letter to Lord George Hamilton, deprecates the suggestion that its object in asking for a searching inquiry into the economic conditions of selected typical Indian villages is to establish unfavourable conclusions. The Union rightly desires an answer to the question whether it is true that the cultivator has been sinking more deeply into poverty during late years. There is a general feeling that the reasons given by the Secretary of State and the Government of India for not acceding to the proposal of the Indian Famine Union are altogether unsatisfactory. The fairly elaborate statement of the Government of India betrays, we fear a slight nervousness on the part of the authorities to face the results of the kind of inquiry demanded by the signatories of the Famine Union. The authorities cannot be blind to the fact that the feeling is widely prevalent that the condition of the Indian cultivator has within the last decade grown from bad to worse and the attempts to evade a searching inquiry into the question will only tend to damage the credit of Government.

Mr. Naoroji's Candidature.

The news that the venerable old Parsi has been selected by the constituency of North Lambeth as a liberal candidate in the forthcoming election has been received with great approval throughout the country.

There is something pathetic in the career of this good old man devoting his whole life to advance the best interests of his country, pursuing his own methods despite all obloquy and calumny, and always stating plainly what he considers to be the truth. Patriots of his type are few and far between and it is hoped that North Lambeth will afford the venerable Indian patriot one more opportunity to plead the cause of his country in the House of Commons.

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THE COST OF POWER.

ENGINEERS are beginning to recognize the fact that after a century of development the steam-engine has been brought to the highest degree of perfection that is attainable and to confess in despair that now even under the most favourable conditions it is a very imperfect machine for converting heat generated by the combustion of fuel into work. The efficiency of a heat engine depends upon the temperature with which the working fluid enters the engine and the temperature at which it is ejected. In the case of the steam-engine the range is comparatively small and at the outside does not amount to more than 300° F. under which conditions the theoretical efficiency of a perfect heat engine cannot be more than 33 per cent. and in practice not more than 20 per cent. has been actually realised. The vast majority of small steam engines do not attain more than a fraction of even this meagre degree of success and we shall probably be right in stating that the average thermal efficiency of engines in this country excluding a few large condensing mill engines is under 5 per cent. That is to say that of the heat generated by the burning of 10 lbs. of coal in the boilers which supply steam, we obtain only the equivalent energy of one-half of a pound of coal in the effective work done by our steam engines. This extremely unsatisfactory result has long engaged the attention of Physicists and Engineers and enormous sums of money have been expended in endeavouring to obtain some process of converting heat into work which will yield more favourable results. The introduction of the gas engine with its immensely greater range of temperature in the working cylinder about 30 years ago marked the commencement of a new era in our methods of obtaining power and in the case of small engines remarkably good results were soon obtain-

ed; but for a long time the difficulties connected with the working of large gas engines seemed insuperable. Within the last few years, however, they have been overcome and at the present time there seems to be no practical limit to the size of gas engines. In a paper read before the British Association at Belfast Mr. H. A. Humphrey stated—"The development of gas engines which has taken place during the last few years has but few parallels in the history of engineering enterprise. Gas engines of 1,200 H. P. and 1,500 H. P. are already working and others of 2,000 H. P. to 4,000 H. P. are being constructed. In the Paris Exhibition of 1900, a 600 H. P. Cockerill gas engine created much surprise but now the makers have in hand an engine of 2,500 H. P. and are quite prepared to build a 5,000 H. P. gas engine." The main secret of the success which has been obtained is improved mechanical construction, the provision of efficient arrangements for keeping the working parts cool and the adoption of much higher pressures at the end of the compression stroke in the cylinder whereby the use of a very much poorer quality of gas is possible. The waste gases escaping from blast furnaces have been found admirably adapted for producing power in large gas engines and as much as 1,000 H. P. can be obtained from every ton of coke that is consumed per hour in the manufacture of iron in blast furnaces, so that there is no doubt that the combination of a blast furnace and a gas engine is the most efficient thermal process which has yet been devised. There are many processes suitable for the manufacture of gas of a poor quality in large quantities which can be efficiently used in large gas engines but of these we need only mention one, the results of which are remarkably promising. Dr. Ludwig Mond of the great Cheshire Chemical Works owned by Messrs. Brunner Mond and Company has devised a process of manufacturing producer gas which from bituminous coal yields from 1,40,000 to 1,60,000 cubic feet of gas per ton of fuel fed into the producer

and at the same time recovers as much as 90 lbs. of sulphate of ammonia, the value of which is about Rs. 160 per ton. Using this gas, one H. P. hour per pound of fuel can be obtained, a result which is much superior to that obtained in the largest and best type of steam engine.

Concurrently with the development of the gas engine as one form of internal combustion engine, we have to record the progress made along parallel lines by a similar type of engine in which kerosine oil or crude petroleum is used. In the latest form of oil engine one H. P. hour can be obtained from 0.75 lbs. of kerosine oil, but kerosine oil costs Rs. 90/- a ton and the oil engine can only successfully compete against the steam engine when the power required is small and then the steam engine is notoriously at a disadvantage. Crude petroleum can however be obtained at about Rs. 30 per ton in Madras and the efforts which have been made to utilise this liquid fuel in internal combustion engines have resulted in no small measure of success. By slight modifications in their construction, most forms of oil engine will work with liquid fuel, and of engines of over 20 H. P. can be obtained which do not consume more than four-fifths of a pound of liquid fuel per hour. Excellent as this result may be, it is entirely put into the shade by an oil engine of German origin, known as the Diesel oil engine, which consumes as little as 0.41 pounds of crude petroleum per H. P. hour, indicating that the thermal efficiency is well over 30 per cent. or about the same value as the maximum thermal efficiency of a perfect steam engine.

This very brief summary of recent progress in methods of developing power is put forward in the hope of drawing attention in India to the subject. Our resources are so limited that we cannot afford to waste them and the users of power, whether in small or large quantities, must keep abreast of modern progress in this direction if they wish to successfully face the competition of progressive

countries. Where water power can be obtained the cost of production is generally much lower than by any of the means we have hitherto mentioned; but unfortunately in this country it is only available in places where it is of no use and to convey it by electricity to any distant point is only feasible on a scale which, with one single exception, is at present far beyond industrial needs of the country. There are a few instances such as those at Gokak and Ambasamudram where water power has been successfully used to drive cotton mills but the only case of the generation of a large amount of power and its successful transmission over a long distance is that which has recently been carried out in the Mysore Province.

The successful completion of the Cauvery Falls Power Scheme has naturally attracted a large amount of attention in India not only because it is the first work of its kind that has been carried out in this country but also because of the extremely satisfactory financial results that are expected to attend its operation. The circumstances were unique and are not likely to repeat themselves, so that the bare statement of the facts of the case does not afford much information that is likely to be of use elsewhere and it is necessary to carefully examine the details of the scheme and eliminate from it all the exceptional items before we can obtain data which may prove of use in the consideration of other projects for the development of large amounts of power.

The scheme as carried out provided for the generation of sufficient power at the falls to yield 4,000 H. P. at the Kolar gold field, distant by the transmission line 93 miles. For the power that is being made use of, the Cauvery Falls offer good facilities for its production at a moderate capital outlay. The supply of water may be regarded as reasonably certain all the year round, the fall is a very convenient height and the hydraulic works presented no features necessitating excessive expenditure on their construction. The transmission

line is a long one but this is to a large extent compensated for by the compactness of the distributory works, where the power is employed in comparatively large units and in most instances continuously night and day. All things considered these works may be regarded as a favorable instance of the utilization of water power. In round figures the expenditure has been £800,000 or forty five lakhs of rupees, equivalent to a capital outlay of £ 75 or Rs. 1,125 per horse-power available.

At the present time the total amount of power generated, at the Kolar mines is probably not far short of 10,000 horse-power and careful calculations showed that the annual cost to the mines was over £30 or Rs. 450 per horse-power per annum. This expenditure on power is undoubtedly very heavy and is largely due to the gradual growth of the demand for power and the utter impossibility, during the opening up of the mines, of making provision for subsequent requirements. As we shall see later on it would now be possible to provide 10,000 horse-power for a very much smaller annual charge than has been, and in fact still is paid. The agreement between the Mysore Government and the General Managers of the mines provides for the very early recoupment of the capital expenditure as the life of the mines is a somewhat uncertain quantity. During the 1st year, the charge per horse-power is to be £ 29, during the next 3 years, £ 18, during the fifth year £ 14 and for all subsequent years £ 10. The returns to the Mysore Government in 5 years will be £ 380,000 on a capital outlay of £ 300,000 and after that they will receive practically 10 per cent. on their investment. On the other hand the mines, without incurring any outlay, will after the first year save £ 50,000 a year except during the fifth year when they will have to pay an extra rate which will reduce the saving to £ 26,000. In the sixth and following years they will save as much as £ 80,000 a year on the present rates for power. For both parties the results are magnificent and it would be difficult to overestimate the credit due to those

who have conceived and carried to a successful issue a scheme possessing so many novel features in the engineering and holding out promise of such exceptional financial results.

Having thus briefly examined the Cauvery Power Scheme as it is actually working let us now eliminate all the special features due to its connection with trading ventures of uncertain duration. We may assume that such a scheme would cost what it approximately actually did cost viz., £ 300,000 and that the expenditure has been divided under the following heads.

Hydraulic works	..	£ 65,000
Turbines etc.	..	35,000
Generating station	..	40,000
Transmission line	..	95,000
Distributing plant	..	65,000

The working expenses may be estimated as follows :

Rental for water power @ 10/- per H.P. per annum	..	£ 2,000
Interest on capital @ 5 %	..	15,000
Working expenses	..	6,000
Sinking fund for Machinery @ $7\frac{1}{2}$ % on £ 110,000	..	8,250
Sinking fund for other works @ $1\frac{1}{2}$ % on £ 190,000	..	2,850
Total	..	34,100

Of the above items the most difficult to estimate is that due to depreciation, probably if anything the rates allowed are excessive but a liberal allowance for contingencies is necessary. Out of date electrical machinery is only worth scrap heap prices and it would be somewhat rash to assume that within the next twenty years there will be no material improvement effected on a three phase transmission at 30,000 volts. Accepting the above figures, we obtain the result that to generate one

horse-power continuously costs £8-10-0 per annum. Under extremely favourable circumstances as for instance with a short transmission line it might not amount to more than £ 6, and under less favourable conditions say with a transmission line 200 miles in length it might amount to £10. These figures are much higher than the estimates generally framed regarding the cost of utilizing water power but as the data they are based upon are taken from actual results they are less open to criticism and moreover they do provide for an adequate return to every interest involved which is not always the case with projects which have been carried out in the past in other countries.

The average cost of one horse-power per annum at the mines is authoritatively stated to be fully £30 and the reason for this excessive charge has been briefly alluded to. The engines which generate this power are scattered all over the field, some are large, some are small but in almost every case the conditions under which they work are not favourable to fuel economy. The bulk of the power is absorbed in driving the mills, working air compressures and in the winding engines which work the hoists at each shaft. The success of the Cauvery electrical scheme demonstrates the possibility of generating all the power in a central station and distributing it to the places where it is wanted by electricity. The question is what would such a scheme cost and at what rate could power be supplied.

Practically there are available two sources of fuel supply, (1) coal from Bengal or Singareni costing about Rs. 20 per ton and possessing a calorific value of rather less than four-fifths that of good Welsh coal, (2) Liquid fuel imported from Borneo by the Shell Transport and Trading Company, costing about Rs. 36 per ton and of a calorific value 70 per cent. greater than that of country coal. The coal must be burned in boilers and its energy converted into work by the agency of steam but the liquid fuel can either be burned as coal or used in a suit

able form of internal combustion engine. With the best type of steam engine the consumption of fuel in boilers may be taken as 2 lbs. of country coal per horse-power per hour or $1\frac{1}{4}$ lbs. of liquid fuels so that the cost of power is not materially different whichever of these fuels be employed. But if the liquid fuel be used in an oil engine the consumption varies from 0.80 lbs. in an engine of the Hornsby Ackroyd type to as low as 0.41 lbs. in the latest form of Diesel engine. Obviously the extremely remarkable economy of the latter type of engine presumes for it a great future and we propose to compare the cost of supplying 10,000 horse-power from a central station by means of alternators driven by (1) Steam engines and country coal and (2) Diesel oil engines and liquid fuel. To allow for losses of energy in the alternators, transmission line and motors we shall assume that 100 brake horse-power at the engine will give $66\frac{2}{3}$ brake horse-power at the motors and therefore to obtain 10,000 horse-power at the motors it will be necessary to generate 15,000 horse-power at the engines. As the engines will have to run day and night it will be desirable to provide $\frac{1}{3}$ more power than will be actually required to allow each engine to be shut down for examination or repairs. The central station would therefore be provided with twenty, 1,000 horse-power engines and an equal number of alternators. Whether steam engines and boilers be used or Diesel oil engines the capital expenditure will not be materially different. The preparation of detailed estimates of the cost of either of these two installations is a work of some magnitude and could only be properly done after extensive enquiries among machinery makers all over the world. Instead of doing this, I have carefully examined the expenditure on a number of large power stations in England and have gone through the estimates for the work which has already been done in Mysore and as a result I have come to the conclusion that to carry out this scheme in its entirety would cost about £ 500,000 or

£50 per horse-power just two thirds the rate of the capital expenditure already incurred to supply the Gold fields with power. Now as to the annual working expenses, the main item would be the cost of fuel. Assuming 2 lbs. of coal or 0.41 lbs. of liquid fuel is consumed for each brake horse-power hour of the engines, the quantity of coal required per annum would be 116,000 tons which at Rs. 20 per ton would cost Rs. 23,20,00, whilst of liquid fuel the quantity would be 24,360 tons costing at Rs. 36 per ton Rs. 8,76,960. Stores of various kinds would cost about one lakh, per annum and the expenses for superintendence, labour and management would fall within 2½ lakhs so that the working expenses of the scheme would be

By steam power would be about	
Rs. 27,00,000 or ..	£ 180,000
liquid fuel engines	
Rs. 12,50,000 ..	£ 83,400

To these charges we must add interest on capital at 5 % and a sufficient charge to form a sinking fund to extinguish the capital expenditure in a reasonable time. The life of the mines is an uncertain quantity but to assume that they will last another 15 years is not a very sanguine estimate and if the interest on the sinking fund be taken at 5 % the annual charge on a capital outlay of £500,000 will be £ 25,000 a year.

The total cost of 10,000 horse-power then works out as follows.

	Steam	Liquid Fuel.
Working expenses	£ 180,000	£ 83,400
Interest on capital	25,000	25,000
Sinking fund	25,000	25,000
Total	£230,000	£133,400

That is to say the charge now estimated at over £30 per horse-power would be reduced to £ 23 in the one case and £13-10-0 in the other, and an annual saving in working expenses would

be effected of £ 70,000 or £ 166,600 according as the old or the new methods of generating power were adopted. These rates cannot of course compare with those which the mines will ultimately pay for the water power of the Cauvery falls but the quantity of that power is limited if a continuous supply is essential. Possibly the falls may be able to yield another 4,000 H. P. continuously but that is the maximum that can be obtained without expensive storage works. It would therefore seem that there is ample room on the mines for some such project as has just been outlined and there is no doubt that if advantage is taken of the recent rapid progress that has been made in the development of the internal combustion engine a very material economy can be effected in the working of the mines. The market value of these mines at the present day excluding all those that are not paying dividends is given below.

	Nominal Capital	Market value.
Mysore ..	£ 265,000	£ 3,710,000
Champion Reef ..	236,500	2,956,000
Ooregaum ..	291,500	1,350,000
Nundidroog ..	242,000	968,000
Balaghat ..	256,000	439,250
Total	£ 1,285,000	£ 9,423,250

A saving of £166,600 a year would increase the dividends by 12½ per cent. and would increase the actual return on the market value of the shares by 1.8 per cent.

The Kolar mines are an instance of a large amount of power being required in a place where coal and liquid fuel can compete with one another on approximately equal terms but there are many places where the price of coal is so low that it possesses an immense advantage over liquid fuel as a heating agent. We have seen that the Diesel oil engines use but slightly over ½ the weight of liquid fuel that the best steam engines require of Indian coal but we can place coal on much more

equal terms with liquid fuel if we abandon the steam engine and first of all convert our coal into producer gas and then use this producer gas in a gas engine. In this way we can obtain 1 brake horse-power from 1 lb. of coal and although this doubling of the efficiency of coal as a source of power would still leave to liquid fuel the premier position at Kolar on account of the high cost of coal, yet in Calcutta where liquid fuel costs from $3\frac{1}{2}$ to 4 times as much as coal the position is reversed. There the marvellously economical Diesel oil engine would use about $\frac{1}{3}$ rd the weight of fuel that would be consumed by a producer gas plant but the fuel costs 4 times as much and hence in Bengal, and in every other place where coal is equally cheap, no form of engine can compete with the large gas engine working on producer gas.

So far as can be foreseen after a century of continuous improvement the steam engine has reached its ultimate limit of development and already it has been hopelessly beaten by the internal combustion engine a product of the last 30 years. For the generation of large amounts of power the day of the steam engine should have passed but that it has certainly not so vanished is simply due to its immense prestige and to the timidity of engineers who are called upon to undertake the responsibility of deciding the form of motive power to be adopted. Where fuel is cheap there power is most largely generated and as the cost of the fuel is but one item in the working costs of an installation whether it be a mill, a central power station or an electric light plant, and consequently engineers are slow to risk their reputations on new ideas with which they have no personal experience. Hence the steam engine flourishes and will probably long continue to flourish.

Except in the neighbourhood of the mining districts coal is by no means a cheap commodity in India and a poor country can only hope to improve its material position by utilizing its resources in the most economical way possible. Of mechanical power we make little use outside a few big

mills and factories. Industrial undertakings are few and scattered over wide areas so that the advantages which can be obtained from concentration in a limited area are entirely lost. Central power stations are an impossibility and each little user of engine power works his small plant at great expense. A small steam engine is a frightful source of waste and yet it is almost invariably employed. Small oil engines are however beginning to be used on account of their convenience rather than because of their economy. Notwithstanding the fact that kerosine oil costs Rs. 90 a ton or thereabouts, they are much cheaper to run than small steam engines burning coal at only Rs. 13-8-0 per ton. Liquid fuel engines of small size do not work satisfactorily at present but the practical limit of size is rapidly decreasing and it is probable that engines of 4 or 5 horse-power will be procurable at no distant date and as the cost of fuel will not exceed As. 1 per hour for 4 horse-power it should be possible to devise many ways in which it will be profitable to employ them.


During the last 3 years an $8\frac{1}{2}$ H. P. oil engine has been at work in the School of Arts, Madras under practically a full load for eight hours a day. The cost of running per day has been as follows :

Oil	Rs. 2 4 0
Wages	.. 0 8 0
Interest and depreciation	.. 1 0 0
10 per cent. on Rs. 3,000.	
Lubricating oil and stores and	
repairs	.. 0 8 0
<hr/>	
Total	4 4 0

Equivalent to As. 1 per horse-power per hour. Compared with a small steam engine the economy is fully 50 % but if liquid fuel were used the charges would only amount to Rs. 2-12-0 per day and the oil engine would then be three times as cheap a source of motive power as the small steam engine.

ALFRED CHATTERTON.

MADRAS LEGISLATION ON IMPARTIBLE ESTATES.

 VARIETY of views has found expression, already, on the subject which forms the heading of this paper. I am not sure that to a great extent, I shall not be repeating them; for I have not been able to follow the public discussion of the topic with the closeness of attention I should have liked to bestow thereon. It is nevertheless not altogether superfluous that repetition after repetition should take place in order that arguments on either side, which too often fall on deaf ears, might duly tell and the *via media*, if one exists—I think one does exist in the present circumstances—might be adopted by the Legislature, in the shape of a reasonable adjustment of clashing interests, suitable to the growing times, their signs and exigencies—without incurring, not unjustly, the odium of inflicting an unmerited and gratuitous injury on innocent members of families, by conferring on others what one might well call unearned advantages without being denounced as a rank socialist for using that epithet. To put the whole case—its *pros* and *cons*—plainly, unmincingly and in its several aspects, is perhaps one of the best ways of bringing about the desirable result and saving the piece of legislation, which is looming in the near future, from proving a halting measure, entailing more of hardship than of relief, as the effects of a wholesale and over-zealous partitionship on the one hand and of unsparing and indiscriminating opposition on the other. This task I shall endeavour to perform to the best of my judgment.

Having regard to the very emphatic and unequivocal declarations to the contrary not long ago by the Government of Madras, the last year's abrupt enactment on the subject was a striking instance of the unexpected happening. So clearly was this the case that even that ill-developed little product was hailed, at its

birth, with a chorus of joy, which is only understandable as warranted by the groundwork of sentiment and of expediency, which, within certain bounds, are both beneficial and defensible but which had, till then, been obstinately refused authoritative recognition. So sudden, so complete and—let me be pardoned for adding—so severely unilateral is the now-prevailing affection for the landholding classes, that one cannot help feeling a lurking doubt whether the change of front is not, after all, due to an accident—the accident of the present or recent personnel of the local Government—and whether a precisely similar accident of the contrary kind might not, any day, bring on a reaction and upset the whole. But let that pass. Democratic opinion on the other hand is dead against it, as it must be, in so far as the maintenance intact of the intermediate body, which the coming Bill might strive at fortifying in some instances and at creating in many more, means that more money is taken out of the already lean pockets of the hardworking and struggling ryot than does actually go into the public exchequer and that the difference is intercepted for the benefit of individuals who—to put it broadly—do not always appear to employ their superfluous wealth on any principle or in any form which would profit their tenantry, appreciably if not adequately—a criticism which is, to some extent, justified by the existing state of things and by the paucity of any brighter prospects within easy ken. One would indeed attach considerable force to the democratic argument in question if one could, at all, be sure that, if released from the grasp of the interpolated classes, the sums so arrested would remain in the pockets which give them forth and not be only sucked in and lost undistinguished in that ever-widening and all-swallowing vortex of Indian Finance, the action and movements whereof proceed on methods which are uninfluenced by outside criticism and which are subject to no legitimate or authorised extra-official check and control, such as would

ensure at least a good slice of the rescued sum for the special behoof of the particular classes which originally owned them. But there is this conclusive answer to the democrat, *viz.*, that, wisely or unwisely,—wisely I think on the whole—the Permanent Settlement is a fiscal arrangement for all time to come and that it cannot be reversed, revised or departed from, without perpetrating a flagrant breach of faith, if not also a gross political blunder.

Practical-minded men also shake their heads, ominously and in despairing disapproval, having seen by experience that the bulk of the lucky possessors of the fortuitous riches under consideration have not risen most above the description—though about two score years old—of the typical eldest son who has been truthfully, though bluntly, hit off by Wilkie Collins through his hero, Basil, thus:—“When a family is possessed of large landed property, the individual of that family who shows least interest in its welfare, who is least fond of home, least connected by his own sympathies with his relatives, least ready to learn his duties or admit his responsibilities is often that very individual who is to succeed to the family inheritance—the eldest son.” Impartial and observant men will have considerable difficulty in deciding for themselves how far, speaking of the generality of them, the types of the aristocratic eldest son—such as we have, or may hope to have for a long time to come—are likely to be imbued with livelier realisation of their duties, for being snatched away from customary and congenial kindred and home influences (such as they are) and subjected to a strange and too often estranging surroundings under a short-lived discipline, during which lordly notions and habits of stand-offishness and expensive, isolating and novel, though refined, accomplishments grow—venially perhaps on the eldest who would inherit wealth—but to their decided disadvantage on his juniors who are, usually, destined to be cut off with a pittance, little more than enough for an animal life.

But it behoves the practical man, all the

same, to recognise this silver lining to the cloud *viz.*, that it is far better, on the whole, for a community or a nation to possess and tolerate in its midst a body of the sort of spendthrifts who, notwithstanding their voluptuous pleasures and doubtful luxuries, and at least in times of national trials and tribulations—are severally amenable to be moved to striking displays of generous impulses by friendly counsel or by laudable personal ambition than a similar body of corporate existence, about whose immunity from correction a well known proverb speaks with a great deal of truth, though perhaps with too much levity and too much virulence. He may also find it not a bad plea that a nation, with such a class as a component element, will possess men and means to help, substantially and with admirable munificence, wide-spread and far-reaching schemes of charity and other forms of benefaction—like copious and perennial rivers which, while emptying their superfluous or unutilised water-treasure into the sea, fertilise tracts which adjoin and which they are made to reach. The further consideration, which may be advantageously thrown into the scale, is that the body in question enables the community to score credit and honor by that body playing fitting hosts to big or notable folk, by “donating” bounteously towards grand and costly memorials, and also perhaps by turning self-paying guests—robed in gold and laden with jewelry, in their antique and infinite variety, to enhance the pomp and picturesqueness of rare, spectacular shows, influentially got up as indispensable. Leaving it to the judicious reader, however, to strike the balance between the advantages and the drawbacks above detailed and draw his own conclusions in making up his mind on this aspect of the question, I shall pass on to the next objection, which emanates from or relates to the junior members of the land-holding class—an objection which, I must say, is, in a vast number of cases, the strongest, the weightiest and the gravest to be noticed.

These junior members deplore indeed that, by the mere accident of birth, they have to forego what are unequivocal birthrights to their apparently less lucky compatriots down to the veriest blacksmith and cobbler, *i.e.*, the rights to share or enjoy the paternal heritage equally with the eldest-born. But this is an unavailing complaint; for, in the first place, accidents of birth do play an important part in many other affairs of life, momentous and otherwise, and have to be contentedly put up with; and, in the second place, the rule or the custom, which confers an advantageous status on the eldest-born, is as old as Hindu law and is indigenous in origin, though prevalent elsewhere as well. What is more to the point is to note and lay stress on a fundamental distinction which makes a material difference between the Indian cases and those elsewhere. Let it be resolutely and unceasingly kept in the front, that elsewhere the foundation of the landlord class is one of tenure, feudal and the like, and estates there descend under a system of law, which admits of no co-parcenary rights accruing to the successors of the original recipient at any stage in its devolution, whereas the groundwork of our Zemindars' estates on the other hand has been, from the first and in the main, a *tacit family compact*, which again, in its turn, has found its basis in the potency of mutual family affections and in the consciousness that union is strength to each and all of the component parts. But a family compact, bottomed as it is on family love and harmony and mutual interest, is by the very nature of it, liable,—as altered or varying conditions require—to be any day terminated, revised, or modified either by concurrence when feelings are friendly, or by conflict when they are hostile, in which latter case the arbitrament of the strong arm or the menace of it was not an uncommon factor in pre-British times and even in the earlier periods of the British rule. Thus the bane and the antidote were there, quite at hand. But, when under Pax-Britanica the argu-

ment of the fist came to be effectually neutralised by the unrivalled supremacy of law, the junior members have lost their former safeguard and found themselves at a discount in righting their wrongs; while the tribunals of the country, though continuing to recognise the basis of the family compact, have been vacillating or at variance not a little in their views. It is indeed true that no less an authority than the Judicial Committee of the Privy Council and so recently as when the Nuzvid and Davaracotah cases came up before it *i.e.*, within five and twenty years from now, declared itself in favor of acknowledging the right of the family to end or mend the system of unity and joint enjoyment, though the system has gone on for a long course of years. But, on the contrary, the pronouncements were not rare, which held the fact of successive enjoyment, for a series of years without partition, as taking away from the families the liberty to break up the union or claim equal participation in the estates concerned—a view which has coolly given the go-by altogether to the underlying family compact, perhaps by unconscious assimilation of Indian estates to their seeming counterparts elsewhere.

Notwithstanding that partibility, at the will and pleasure of the bulk of the family, was thus refused more or less definitively, the right of the single holder to cut up the corpus or alienate the whole or substantial portions thereof was, however, what could not be readily swallowed; and it was therefore uniformly denied till the bolt fell from the Blue in 1888 in the shape of a decision by the Judicial Committee itself—usually referred to as the 10 Allahabad case—viewing the holder for the time being as armed with absolute rights to give a good slice of the estate, away from and irrespective of the family. This was a death-blow to the law of Mitacshara, which is and has been the undoubted personal law of every South Indian and which vests in sons from their very birth, rights in all species of property, but now surviving, *i.e.*,

since the above decision, only in so far as partible property is concerned. This spread consternation enough in all conscience. But it still left a starlight of hope that, possibly, the diversion of estates in their entirety from the family might yet meet with a check. Later on, however, Herod was out-Heroded—notwithstanding the almost heroic unselfishness of the present holders of the Bobbili and Venkatagiri Estates to avert the catastrophe—when, in what is now notorious as the Pittapore case, it has been decided, not only that there could be a gift of the whole estate during the holder's lifetime, but also by testamentary disposition, even though thereby the family—participle though it be or rather because it is patrician—is utterly beggared—the axe being thus laid at the very root of the principle of survivorship, which is the distinguishing, essential and an integral part of the Mitacshara School of Hindu Law. This latter decision has evidently been quite a bomb-shell, which burst in Zemindari circles and among Mitacshara lawyers; and it is easy to see that the deep and wide discontent, created by it, is the proximate cause of the legislation in question.

That the Government, fortified by its absolute majority in the Legislature, should take cognizance of the widespread feeling of dissatisfaction with the latest judicial pronouncement, and step forward with a remedial measure to rectify matters and restore equanimity in an important section of the subjects, is as it should be; and it redounds, in no small degree, to the credit of the land-holding classes themselves, that—instead of sordidly and selfishly going into raptures over the concession to them of unlimited and unchecked liberty—they have come forward to ask for legislation, so that those coming after them may not be tempted to play ducks and drakes with the property passing into their hands. In this they show considerable good sense and foresight and some proof of the change, already wrought in their ideas and sentiments by the liberalising tendencies, which are spreading all around, penetrating them as well, despite their

actual isolation from the middle and other classes on a lower plane. In so far, therefore, as legislation is undertaken by the Government and cheerfully acquiesced in by the Zemindars to limit the latter's alienating power by restoring the law which is embedded in their own and people's consciousness *alias* the Mitacshara Law, the passing of a law is both welcome and wise.

But I think that the opportunity might well be taken, to go far farther than for merely re-establishing the *status quo* with all its imperfections and crude ideas of individuality and thereby safeguarding the interests of only the fractional few who are lucky enough and likely enough to inherit estates by primogeniture. A good, forward step should also be taken to improve the residual many who are a legion, by provisions designed to lift them to a status of true dignity and usefulness by making it possible for them to receive a training and a command of facilities and of means to cultivate their talents to the full and thereby rise superior to the position—if I may say so—of rotting as offals of aristocratic families. For who does not know that these—as though deadened to higher aspirations as matters stand—are now only content with a smattering of education and a life of enforced sloth and of electroplate gentility with its many conventional burden and “sorrows” but with a comparative pittance in the way of allowance. The interposition of the Government for such a purpose would be doubly welcome and doubly wise—not to say that it would amount to an achievement of high statesmanship. Now that the ideas of honourable living and of creditable conduct are inspiring, and clearer conceptions of mutual rights and reciprocal obligations have more than begun to dawn on the Zemindars equally on others, I am not at all sure that they themselves—if a reasonable solution were seriously put to them and resolutely pressed—would not join with their juniors in asking for some arrangement, equitable all round, and such as would sustain and deepen affection,

preclude discord, and expand the utility and enhance the credit of their *whole* class.

There is another and further reason why Zemindars should or would agree to the amelioration and elevation of the junior and other excluded members of their family, and I trust that it would not be regarded as far-fetched. It goes without saying that their body as a whole has already advanced beyond the stage, when—either as a matter of exact truth or as a piece of merited satire—lords were represented as containing members who could not spell correctly or had not due respect for rules of grammar, but who loftily retorted, on suggestions to mend, that they might as well be asked to brush their own coats or black their own boots. It equally goes without saying that—proper scope opening to them, and adequate chance being vouchsafed to them—they would display the requisite solicitude and assiduity to march onward and, in fullness of time, acquire—in the words of the great Gladstone—"the double title of inherited station and personal distinction." Assuming these as within their range of ambition, would it not be an insult to them to suppose that they would be so stupid and so inconsistent as to withhold help from their near kith and kin, with talent, aptitudes, and aspirations like unto theirs, and that they would only wish that they alone should shine above the horizon but that others, though of their own stock, should not even spangle the firmament as lesser stars.

Why would they resist—why should they resist—if, themselves retaining to themselves the wealth of their inherited station in the bulk or in a considerable proportion, they are only asked to allow the overflowings of their superabundance to be what would prove an abundance enough to their close kindred, to utilise their intellectual and moral gifts and achieve honor and distinction—to themselves and to the family to which they belong—with the facilities which their rank and blood confer on them, as history shows that the like of them have done and are doing, in a remarkable degree.

Still, to re-assure assurance, some comprehensive form of legislation, which will, by coercion of law, secure to younger sons the training, scope and opportunities for usefulness, such as are apparently vouchsafed to younger sons in aristocratic families in other countries from a sense of moral duty, is urgent; for, it is of utmost importance that whatever is given is *not* given patronisingly and *not* received with humiliation. What form such an arrangement might assume is not difficult roughly to outline; but it will be time enough to do so, when the policy and wisdom of change in this respect shall have become practical politics.

But in the meantime one cannot but regret—regret deeply—that no such ambition fires our Government or the Legislature; but that, on the contrary, a course is adopted, in a light-hearted and free and easy way, which may be pardonably characterised as tantamount to confiscation and as next door to spoilation; for, the work of tabulating and declaring what are or shall henceforth be impartible estates, is as uncalled for, and complicated as it is retrograde and repressive, arbitrary and unjust. I freely concede and even plead strongly that a decent number of impartible estates should be maintained, hedged round and secured from inroads. I would—for reasons which I hold over—even go much further than the legislature apparently proposes to do, and have every permanently settled estate—be it a vast tract, a Mitta or a single village—declared impartible, if only an adjustment, such as I have urged above, were taken in hand and grappled with. In such an event, what is now a solid grievance would be little more than a *sentimental* one. But if the narrow policy, now meant, is alone to be persisted in, the task should be accomplished without trampling upon rights, already acquired under personal laws, pledged against attack and usurpation, by the very constitution of the British Indian rule, as one of its fundamental principles. To say that the Hindu Law is solemnly secured to Hindus is to state what

is a piece of elementary knowledge. Nor is it any more than the A B C. of that law to affirm that, under the Mitacsbara School which is the governing authority in this Presidency, every Hindu *prima facie* has acquired rights from the very date of his birth—ay, from the moment he is a living foetus in the womb—and is presumed to possess the absolute liberty to assert and claim them at any time—even during his minority through a next friend, with rights of survivorship—anticipating or overruling testamentary power if the holder dies without lineal heirs.

Consistently with these, the Legislature will be quite within reason and sound policy, if it proceeds to work thus: (1) to declare as impartible all such estates as have been *judicially* declared to be so (2) to keep clear of the estates which have been, in a like manner, declared partible; for it is in *these* cases, the flagrancy of killing pre-existing and subsisting rights is most glaring and indefensible. All the estates, which have come into being as separate units by successive divisions and sub-divisions of the Nuzvid estate, fall under this category; (3) in all other cases, the presumption of partibility continues and nothing should be done till after a thorough judicial investigation and decision which no sort of Commissions and Committees could ever approach, inasmuch as a number of considerations—too many for an exhaustive enumeration here—are involved and have to be disposed of, as effectually as in a Court of Law, where both the contending parties are thrown on their own resources, do their level best, and contend with patience and with equal opportunities—with the two invaluable assurances that the judgment given is by an officer who is bound, not merely in honour, but also by oath, to decide evenly between them and (2) that the judgment passed is subject to being sifted in appeal by other independent minds, similarly bound by oath. It is idle to assert that any approximation can be made to this mode of settling disputes at rest by Commissions and Committees, the members of which are not prevented by any

oath of office from allowing their own and personal predilections and notions of symmetry to have play—even taking it for granted that the parties have the necessary facilities to work on equal terms. None except such as see fit, on principle born of self-consciousness, to cherish a prejudice against Courts of Law or against litigation, as though it were an evil at all times and in all cases, would be so blind as not to perceive that, between the regularly constituted tribunals on the one hand and Commissions and the like on the other, there is a world of distinction—as much as between cultivated intelligence earnestly applied and a rough and ready Panchayat which is good enough to split the difference and dispose of the every-day disputes in ordinary affairs between excited parties such as when each claims his pound of flesh. Where keen powers of sifting contradictory materials and of discriminating between cardinal features are essential, a foregone conclusion, a stretch of authority, and a stroke of the pen ought never to suffice. Among the considerations that one has to tackle, in determining whether a particular estate is impartible or not, may be instanced the following:—When and under what circumstances and for what purpose was it constituted a separate estate? Was it at any stage a principality? Was it one that was burdened, by lawful authority, with the service of keeping troops and rendering military service? Was it only a defined tract, over which an officer exercised executive or revenue-collecting jurisdiction? If one or other of these features belonged to it, even then a multitude of other and further questions arise, of which the following may be fair samples. What was the exact position and character of the estate in question at the advent of British rule? Have any things happened to it, either before or after that event, in the shape of an actual and physical division or of an agreement to participate the profits, more or less equally, in denial of the sole right of one alone to hold and enjoy? Conclusions, derived from answers to the first set of queries, are still

liable to be either negatived or considerably modified by the results of enquiries which the second set of questions would call forth. When one is confronted with all this difficulty and complexity, one's obvious course, in fairness, is to *face* them, and the best way to face them is—neither to blink them nor impatiently brush them aside with a high hand, sniffing contempt at Courts of Law—but to stay one's hand, refer the parties to the regular tribunals to obtain a final adjudication, making provision, if one likes, in the enactment, for its inclusion in the list of impartible estates thereafter, if the decision is to that effect.

This ought to have been done last year, and the little measure, which came up for consideration, should have been referred to a Select Committee to report on the subject of *inalienability* alone, in order to pass it for that limited purpose which alone was urgent. In lieu of this plain and just course, all pending suits,—despite the fact that some were then in the eve of being decided, and others reached a stage which admitted of their being decided, at least by one Court, by this time,—were stopped from proceeding further, I must say, outrageously, as it was then manifest to the running man that a mint of money and a mine of labour had been expended on them and a mass of materials had been collected for years, and from a period—be it noted—when the Government vehemently declaimed against this species of legislation and when one could not so much as dream that the Government would be thus veering round. Is it too much to cherish the hope that, in bringing forward the measure which is now in anticipation, a sober consideration will be brought to bear on the question of pending suits and of such estates as are presumably co-parcenary property, in the sense that co-parceners, who do not consent to self-effacement, are in fact alive. A wrong, otherwise uncompensated for right, abstracted, if not even-handed generosity, demands as much.

Let it be fully realised that nothing short of a patient and diligent investigation will yield fair and

satisfactory results, which no amount of spasmodic attention, which alone the Government officers could afford to this task in the midst of their more urgent and multifarious duties—could possibly work out. By way of exception to these classes of cases a predication of impartibility may perhaps *not* be objectionable, if no co-parceners exist, if no co-parcenary rights had accrued and are subsisting, and if the holder for the time being is a consenting party. To go thus far is just. But to pass one inch further will be to trespass on rights, by the exercise of Vis Major and by the Government repudiating, without very cogent reasons, its solemn function, as regards co-parceners who are minors, of being their constitutional guardian, as the Representative of Sovereign Power. The abdication of such a function, as regards minors, and the denial of co-parcenery rights already acquired, will be analogous, as a well-known proverb says—to the hedge overshadowing or devouring the crop which it is meant to preserve and to protect.

Before I close, let me venture to point out two things, which are perhaps plain enough already. In the first place, the very *raison-d'être* of the jurisdiction, vouchsafed to subordinate and Provincial Governments and Legislatures to initiate legislation on this and other matters of country-wide importance, is to serve the special purpose of realising local conditions and local peculiarities and giving them due effect, equitably to all parties. In the second place, it would be playing with that jurisdiction, if not misusing it as well, to frame the coming Bill merely on the lines of the measure which will cease to be in force in a few months; for, by so doing, the Government and Legislature would, not only not be true to that primary purpose but also at once appropriate and reprobate—appropriate by re-enacting the Mitacshara principle of restraining alienations prejudicial to the members of the family—reprobate by violating the very same Mitacshara principle, by imposing the character of impartibility on estates, which are co-parcenary partible property by judicial pronouncements or by legal presumptions which are valid no less till rebutted by positive legal proof to the contrary.

P. ANANDA CHARLU.

THE LATE SIR WILLIAM WILSON HUNTER.

HR. Skrine is to be congratulated on having produced a model biography.* It is not like Boswell's masterpiece, a detailed, not to say obsequious record of daily sayings and doings, but it is a story built up from the hero's own letters, and it faithfully reproduces a picture of the man's indomitable energy, of his ceaseless and untiring work, of his strong family affections, and of his marvellous success in spite of opposition and of numerous jealousies. Dying at the comparatively early age of 59, in spite of constant suffering and bodily pain, he has left behind him a monument of accomplished work which is positively marvellous. And it is work of a most varied character. From the dry bones of statistics and figures he has succeeded in extracting all that is best of history, poetry, philosophy, religion and science and has invested them with a literary charm which is entirely his own. Dr. Johnson's epitaph on Goldsmith may well be applied to Hunter *Nihil quod telegit non ornavit*, and he manages to imbue everything that issues from his facile pen with a grace and an interest it did not possess before. But, whilst recognizing that Hunter's success was due entirely to his own work it must be admitted that he was also singularly favoured by fortune. At the age of 20, after having passed through Glasgow University and the ordinary degree course at Oxford, he resolved to try for the Indian Civil Service which had only recently been thrown open to public competition. He was fortunate in his start, for there were only 207 candidates to compete for 86 appointments. Hunter succeeded in passing fifth, and in the following year (1862) he passed his final examination at the head of the list. After nearly a year spent in Calcutta during which he passed his examinations in the vernaculars and welcomed the bride to whom he had been engaged for two years,

Hunter was sent in December 1863 to Suri as Assistant Collector of the Birbhum District about 100 miles N. W. of Calcutta. Forty years ago 'Competition Wallahs' were new in the land and were not regarded with favour by the old officials trained at and sent out from Haileybury. These latter, many of whom were connected with old Anglo-Indian families and who owed their appointments to private patronage, looked upon the new men as intruders and upon the service as "going to the dogs," in consequence. Here Hunter experienced the first taste of official jealousy which was destined to follow him throughout the greater part of his Indian career. It is difficult now to trace the real cause of this jealousy which continued to be shown towards him not only by his seniors but also by his contemporaries and juniors. Indeed it survives to the present day, and it is by no means unusual when Hunter's name is mentioned to hear it spoken of with a certain amount of disparagement as of a man who is greatly over-rated, and who has gained for himself credit from the work of others. It is possible that a talented young man like Hunter, who had already shown his intellectual superiority over those of his own year, and who was full of ambitious projects may have displayed an amount of 'uppishness' and egotism which was calculated to make him unpopular. We find a trace of this in an incident which occurred with his first District Judge. Hunter was greatly interested in the case of a minor Rajah whom he wished to withdraw from Zenana influence and place under the Court of Wards. He actually went to Calcutta and got the Revenue Board to obtain from the High Court an urgent order to the District Judge to dispose of the application. Returning with this order, given apparently *ex parte*, in his pocket, Hunter found the Judge at the Railway Station, twelve miles from his Court, which had been closed for the holidays although strictly speaking they did not begin till the following day, and at once requested him to dispose of the case.

* Life of Sir William Hunter. By F. H. Skrine, F.S.S. late H. M. Indian Civil Service. Longmans, Green & Co.,

The Judge. 'Nonsense! I've closed my Court and, I cannot possibly take the matter up till my return.'

Hunter. But, Sir, the holidays don't begin till tomorrow. Besides the matter is urgent; the boy will be utterly ruined if we leave him in his present surroundings for two months more.

The Judge. I can't help that; my Court is closed.

Hunter. Well Sir, here is the order—producing it—If you decline to take cognizance of it, I shall have to post it up in your Court."

Most Judges under these circumstances would have told the daring young Assistant to go hang, but in this case the Judge, though highly offended, resolved to return. He preferred tramping to accepting a seat in Hunter's trap, opened his Court a few hours afterwards, received the application, and granted it with a surly 'Here take your order.' Mr. Skrine adds 'The Hetampur Estate was saved,' but one feels inclined to doubt whether two months' recess would have really brought about its ruin, and one cannot also help a feeling of surprise at the extraordinary docility shown by the Judge.

Within a few months of his arrival in his first station Hunter began to collect materials for his first book, the *Annals of Rural Bengal*. In August 1864, he commenced his connection with the *Indian Daily News* by a series of local sketches, which at once attracted attention and procured him a permanent income on the staff of Rs. 250 a month for three articles a week. In the following year he transferred his connection to the *Englishman*, following the Editor Capt. Fenwick, and early in 1865 he also joined the *Pioneer* receiving Rs. 100 a month for a weekly article. This extra work, however, was not allowed to interfere with his official duties, and in August 1865 he submitted to Government some observations on the ancient records of his district, which led to his being placed on special duty to prepare an official history of Birbhum. This was the first of Hunter's special appointments and from this time he left the ordinary routine life of a District Civilian. In 1866 the history of Birbhum was completed, and he obtained permission to print it in England and was also granted a deputation allowance for the work of

Rs. 100 a month with arrears from the previous December. In May of that year he was appointed Inspector of Schools in Midnapur and was ordered to draw up the report of the previous year. In this new capacity he was able to be on the spot during the great Orissa famine and did not neglect his opportunities for observation. In October, however, he was attacked by typhoid, and was sent home in an almost dying condition on twelve months' sick leave; to which was subsequently added a nine month's extension. The leave at home was occupied by bringing out the *Annals of Rural Bengal* and by numerous articles on Indian subjects, especially the Orissa famine in the *Day* and the *North British Quarterly Review*. The *Annals* were brought out by Smith, Elder & Co., and proved to be a brilliant success. They appeared in the very nick of time when public attention had been attracted to India by the horrors of the Orissa famine and the reviews were all enthusiastic in their praise. The following extract from the *Spectator* of 18th April 1868 may serve as an example.

"....If Mr. Hunter does not ultimately compel recognition from the world as an historian of the very first class, we entirely mistake our trade. We never remember to have heard his name before in our lives; he has no administrative reputation, and he can scarcely be 30 or 32 years of age (in reality he was only 27) but unless the book is, as occasionally happens, an exceptional or accidental effort, Mr. Hunter's name will one day be a household word among those who are interested in Asiatic History."

In Hunter's own words this eulogy from such a quarter 'fairly took away his breath.' He at once became a man of mark and for the rest of his furlough in England we find him in constant company of and in consultation with, officials and authors of avowed distinction. During his stay in England Hunter had been allowed access to the records of the India Office and had there found several trunks full of documents of vocabularies of Indian aboriginal races collected by Mr. Brian Hodgson formerly Resident at Cashmere. Hunter placed himself in communication with Hodgson with the result that he resolved to embody these researches into a comparative Dictionary. In order to enable him to bring out the

new work the Royal Asiatic Society, of which Hunter had been made a member, took the unusual step of applying to the India Office for an extension of his leave and also obtained the promise of State support. Four months' extension was granted, by no means a very long time for so abstruse and, to Hunter, novel a work. The following extracts from Hunter's letters to his wife show the estimation in which he was held at this period.

"May 10th. Do you know that we are on the eve of a great success? Yesterday I was closeted with S. F. Currie, Mr. E. B. Eastwick, and Mr. Kaye for several hours. These men, especially the members of Council deal with me as with one from whom they expect great things and of whom they intend to make something... (May 13) This morning I breakfasted with Wyllie, Under-Secretary in the Foreign Department. At two Sir Cecil Beadon is to call for me at the Club. I have a confab too with the Head of the British museum from which great results may come. On Thursday I breakfast and spend the forenoon with Sir Bartle Frere and then call on Heeley. In the evening I dine with the Walter Bagshots, who have asked a number of notable Anglo-Indians to meet me. On Friday I breakfast with a famous Orientalist Mr. Hyde Clerk. Yesterday I attended a meeting of the Asiatic Society. Lord Strangford in the anniversary address twice alluded to me in the most flattering terms. My work has been given a paragraph to itself in the Annual Report...only a moment to say all goes on well. I spent a couple of hours with Lord Strangford this morning. He seems anxious to help me in the comparative Dictionary and the countenance of so distinguished a scholar would be invaluable."

The comparative Dictionary of the Non-Aryan languages of India and High Asia was published in the first week of November 1868 two months after the author had left for India. It is a handsome quarto volume. It gives the equivalent of 188 common English words in 134 languages and dialects of Asia with corresponding ones in Sanskrit, Arabic, Basque, French and Magyar. A page is appropriated to each word, and is headed with the synonyms in English, French, German, Russian and Latin with prefaces in these different languages and the book is prefaced by an introduction by the author of 16 pages which ranks amongst the most brilliant achievements of his pen. Hunter did not hesitate to ask others for help, and though he met with several rebuffs, he also received much generous support. The book was got through at almost railway speed but there are few typographical

errors &c. and no signs of undue despatch. The feat was one equally creditable to the author as to the publishers and printers and is a fair specimen of the way in which Hunter did his work. He seems to have possessed a marvellous power of quick assimilation and reproduction. The book was indeed, as Hunter himself afterwards styled it, a "very bold enterprise", and it is a matter for astonishment that an experiment of this kind in an entirely new field should have met with so general a recognition of merit. It was well received and gained for him the D.L.L. of his University and Honorary Fellowships of the Ethnological Societies of London and the Hague. But this was not the only work on which his furlough was employed. He was constant in his articles to the *Pioneer* and also submitted to Sir Bartle Frere a long scheme for the organizing of an official organ for India like the French *Moniteur* and another scheme for the compilation of a Bengal Gazetteer which had been called for by the Bengal Government whose attention had been drawn to the subject by the "Annals." As we shall see, this led to important results.

On his arrival in Calcutta early in December 1868 Hunter was at first met by a considerable amount of official jealousy. A great change had taken place in the Government of Bengal. Sir Cecil Beadon had left more or less under a cloud on account of the Orissa Famine, and Hunter who had not hesitated to give to his chief loyal support, although at the same time he made no concealment of the actual facts, shared in his chief's disfavour. At first he was offered an appointment inferior to the one he had held two and half years before but eventually he obtained the acting appointment of Superintendent of Stamps and Stationery, but with the avowed determination of eventually employing him to edit a Gazetteer of the Province. He received also a substantial recognition of his Dictionary by the grant confirmed by the Duke of Argyll in a very handsome manner—of £2,000, but as the cost of the publication had

amounted to £1,600 and the four months' extra leave had been without pay, this did not more than represent his actual expense. He was also cordially received by the Indian Press and Mr. (afterwards Sir) John Strachey obtained Lord Lawrence's sanction to an informal arrangement under which Hunter became the channel of communication between the Government and the Press.

But Hunter's position was still an insecure one. He had committed the, in a close service, unpardonable crime, of having earned distinction outside the ordinary groove. A Junior Civilian, with only a few months' experience in district matters, he had gained a distinction in Europe. All official traditions of the service were against him and he had to suffer accordingly. But a new Governor-General, Lord Mayo, arrived in India early in 1869, who had heard of Hunter at home, and who, unfettered by official traditions in which Lord Lawrence, the ex-Civilian had been trained, was prepared to utilize Hunter's gifts. For many years spasmodic attempts had been made to bring out histories and statistical accounts of the various Districts and Provinces. As far back as 1838 an attempt had been made as regards the 50 districts of Bengal by Dr. Buchanan which had cost no less than £30,000. In 1854 Mr. Thornton had brought out a Gazetteer of India which for some time was a text-book, and occasionally a local history the result of independent work, such as Dykes' "Salem a Collectorate" had appeared in one or other of the Presidencies. Towards the end of the sixties the Madras Government had invited Volunteers for the compilation of district manuals, and this call was responded to chiefly by Junior Civilians. The work, however, was carried on without system, and though several important manuals were produced, as for instance Nelson's manual of Madura, they were of unequal value. Lord Mayo resolved to systematize these works and Hunter was appointed to bring out a Gazetteer of Bengal consisting of one volume of 1,000 pages giving a bird's eye view of the Province in its historical, geographical and statistical aspects.

He was placed on special duty and was granted a salary of £1,800 a year with an allowance for local research and literary help. Hunter was delighted with this new appointment which placed him in an independent position, and as a first step towards introducing a regular system, he formulated his scheme of spelling Indian words in July 1869. As was to be expected, so drastic a reform was not received with universal approval, and when carried to extremes, as in the case of names which had become familiar through their historical associations such as *Meerut*, which became *Mirat*, the opposition has not been got over to this day. But on the whole the scheme was a reasonable and necessary one and has at last been generally accepted. At the time however it served to swell the outcry against Hunter's so-called pedantry and served as another instrument to those who were jealous of Hunter's rapid success. So marked was this jealousy that even Hunter's own Government of Bengal made an official protest against the way in which, in his introduction to his Dictionary, Hunter had stood up for the Bhutias against whom a rather unfortunate expedition had been undertaken in 1863-64. This protest brought upon the local Government a rather severe snub and in his official minute Sir H. Maine said :

"We must remember that the personal staff of the Bengal Office has a grudge against Mr. Hunter. Rightly or wrongly some of them think, that the author of the "Annals of Rural Bengal and the Comparative Dictionary has been overpraised. I cannot help surmising that in this letter we have further evidence of the feeling in question."

And the Viceroy said :

"By making Mr. Hunter's Dictionary a subject of official reference, the Government of Bengal makes itself a party in a controversy, which, as a Government, I do not think it can carry on with proper regard for its own dignity or advantage to the public service."

With this powerful support at his back, Hunter could afford to treat local jealousy with contempt, but nevertheless it left its mark, and, as we shall see in the sequel, the feeling continued to exist and in the end was strong enough to prevent Hunter from obtaining the highest distinctions in his own service. Though effectual for the time, this show

of official support in the highest quarters did not add to Hunter's popularity amongst his own contemporaries, and his eventual success was not due to his work, brilliant as it was, but in spite of it. Space compels us to pass more quickly over the ensuing years. Whilst waiting for the information called for from the different districts Hunter employed his time in bringing out a book on Orissa the materials for which he collected during a visit early in January 1870 and which with his usual promptitude was ready for publication by the time the hot weather set in when the reports for his Gazetteer began to arrive. Towards the end of this year Hunter was placed directly under the Government of India as an Under-Secretary in the Home Department, and was therefore allowed to accompany the Supreme Government in its annual exodus to Simla. During the following year (1871) the question of Wahabism began to attract general attention and at Lord Mayo's request Hunter wrote a book on the burning question of the day as to whether "Indian Mussalmans are bound by their religion to rebel against the Queen." It was commenced on the 30th May and on 30th June we find an entry in his diary "Sent off the last sheet to Trübner." The book is of 220 pages and the actual writing occupied 13 days! In September Mr. Norman the Chief Justice was assassinated by a Mahomedan fanatic on the steps of the High Court and at once England rang with the news. The new book on the "Indian Mussalmans" appeared at the nick of time and the demand was consequently enormous; another instance of literary good luck, quite apart from the acknowledged excellence of the book which under other circumstances might have found comparatively few readers. About September 1871 he was appointed Director-General of Statistics and two months later, his health having broken down, was granted nine months' leave to England. Soon after his arrival the news of Lord Mayo's assassination was flashed home, and Hunter at once commenced a memoir of his life,

which however did not actually appear until four years later. In the meantime the success of his "Orissa" and "Indian Mussalmans" had made him a kind of literary lion, and he was invited and cordially received everywhere. In the India Office he discovered the results of Dr. Buchanan's work of 1838, already alluded to, consisting of 49 folio volumes of Mss. and when his leave was about to expire he obtained three months more to enable him to study them. At the end of 1872 he returned to India, and during the next year he seems to have devoted himself entirely to work refusing all the blandishments of Simla Society. Whilst engaged on his Gazetteer, however, he found time to write periodical articles to the '*Englishman*' (in which he had purchased a share) and in representing India in the *Pull Mall Gazette*. Towards the end of 1873 a famine appeared to be imminent in Bengal and Hunter was called upon for a report as to the liability of each Bengal District to famine. "This request" we are told "produced one of those gigantic efforts of which Hunter alone was capable." The work was commenced on 13th November and working from 7 A.M. to 11 at night "with my wife and whole staff" was ready and printed by the 8th December. The volume consisted of 261 pages—224 of text and 38 of prefatory matter. The entry for that day's diary concludes "Sent off copies at once to the Viceroy and Sir George Campbell. Wrote an article for the *Englishman* and corrected 64 pages of volume ii 'Bengal record.' "In the afternoon gave a children's party"! And the marvel is that work done at this lightning-like speed was all thoroughly excellent and exhaustive work. During the cold season (1873-4) Hunter toured to the Western Coast and travelled as far as Goa on work connected with his Gazetteer and returned to Simla about the beginning of April. On the 27th March occurs an entry in his diary which alludes to an incident regarding which the reader wishes that Mr. Skrine had given some more details. It runs as follows.

"I have had to smash—about his lying letters and telegrams in the—! I did it quickly but pitilessly—a single blow, but one that made him the public scorn of the whole of India, and left the steel quivering in his heart. He goes about with a face perfectly haggard and ascribes the stroke to Captain Baring's hand (Private Secretary to the Viceroy Lord Northbrook) I hope that it will stop his wicked mendacity for a time"

Doubtless the punishment was deserved, for there is throughout the book frequent evidence of Hunter's kindness of heart and generosity, but one would like to have some more information regarding the nature of the offence which called for so severe a chastisement in order to be able to judge how far the punishment was commensurate with the offence.

Hunter was not employed on the Behar famine in the handling of which the Government of India erred in the opposite extreme to what it did in Orissa. In one of the letters received by Hunter at this time from a correspondent whose name is not given, there occurs a criticism of Sir Richard Temple, which though severe cannot be said to be unjust.

"Temple is gifted with a splendid insensibility as to means. He is neither sensitive nor overscrupulous, so long as his end is gained, and this is a key to his success. Moreover he never looks back and if a crime were necessary for strictly administrative objects of sufficient weight, he would want neither poppy nor mandragora to make him sleep soundly after taking such an executive step. Could you not give us a reflective article on the idea of Sir Richard as a typical development?"

Unlike Temple, Hunter was by no means a blind follower of superior authority, and in his articles to the *Pall Mall* he seems to have spoken out his mind regarding the lavish expenditure on the Behar Famine very freely, in fact so freely, that towards the end of the year he felt his position to be so anomalous, that he closed his connection with that Journal as the recognized Indian correspondent. The friction thus caused not unnaturally showed itself in obstacles thrown in his way in his Statistical Account, which Hunter wished to bring out in England. Several months were occupied in correspondence, and it is to Sir Richard Temple's credit that recognizing the fitness of Hunter for the great

task, he should have decided to sink any personal feelings he may have felt at Hunter's opposition, though it is also possible that Sir Richard may have judged it safer to have so brilliant a "Chief" 6000 miles away than close at his elbow in India to criticize his famine policy. He sent for Hunter from Simla to Calcutta, and after a long interview, a "touching reconciliation" took place and Sir Richard's support was gained (December 1874). It was arranged that Hunter should proceed to England where he was to superintend the publication of the material which already occupied 20,000 pages of MS. Five Assistants were to be left at his disposal in India who were to work under his special order. Twenty three months were to be allowed to complete the entire Gazetteer in England and Hunter was to go home as soon as the scheme was in working order. This was soon arranged and "except in Madras, where conservatism and jealousy of control were engrained, the whole undertaking was within measurable distance of completion." The scheme quickly received the consent of the Secretary of State and in the middle of April 1875 Hunter started for England. The rest of the year was spent in England, and during the whole of the time Hunter was hard at work not only on his statistical account of Bengal, but on Indian articles for the *Encyclopædia Britannica*, on an edition of the *Essays of John Wyllie*, and on Lord Mayo's life which latter work was completed before he left and was cordially received not only by the Press but also by Lord Mayo's own family. Hunter returned to India at the end of the year and early in January passed through Madras in order to confer with the Duke of Buckingham regarding his Gazetteer. It is to be regretted that the Duke's Government did not see its way to conforming with Hunter's scheme of a universal system and the result has been that there is a lack of uniformity in the Madras Gazetteers. The writer of this paper speaks with experience for he was employed in framing one of the manuals

of the Madras District, and being left entirely to his own resources he feels now that it is too late, how much better would have been his work if he had had the advantage of Hunter's guidance and counsel. Three months of 1876 were spent by Hunter in touring on Gazetteer work, principally in Assam, the history and account of which Province he had reserved to himself, and in the middle of March he again left Bombay for England. The rest of the year was occupied in the preparation of his great work on *Bengal* which according to promise should be completed in twenty three months from April 1875. A week after his arrival he sent the first five volumes to the Under-Secretary of State and promised that the remainder should be ready by November, but in order to bring out the whole of the Imperial Gazetteer for India at least four years would be required. If undertaken in India the work would occupy at least six years and cost £ 6,000 per annum. "In England on the other hand the expense of literary assistance, such as India could never supply, of printing and publication, were much lower" and the annual charge including Hunter's salary of £1,800 would not exceed £ 3,275. This scheme was after a short delay approved and Hunter was allowed to spend four years in England on a salary of £1,500 in order to complete his enterprise. Hunter's promise as regards the Bengal Account was faithfully carried out and on 16th November 1876 he was "able to report its completion. The twenty volumes were all in print, and the author announced his departure on a tour through India, while his establishment remained at home to see the proof sheets through the press."

Hunter had now been 13 years in the service and it must be admitted that his lines on the whole had fallen in pleasant places. Although hard at work, the greater part of his service had been spent in England or at Simla. Beyond a few months of district work he had always filled a special appointment congenial to his own tastes,

and he had now a further billet at home for four years, varied by a three months' trip to India with all his expenses paid. No doubt he amply deserved all that he got, but one can understand the feeling of envy and jealousy which not unnaturally, for human nature is weak, pervaded the breasts of his contemporaries.

Hunter again visited Madras in January 1877 and found the beach heaped with mountains of rice bags, for the Presidency was then in the throes of the great famine. During this visit there occurred an incident thoroughly typical of Hunter's genius to grasp a point in a field new to himself, which had escaped the notice of trained experts. "All night long, he wrote in his diary of 10th "January" I was at the Madras Observatory gazing at the stars and discussing sun spots with Pogson, the Government Astronomer. As Pascal says "*Le Silence de ces espaces infinis m'effraie.*" These "communings with the heavenly bodies produced a theory which proved a nine days' wonder throughout the world of Science."—the theory of the sun spots in connection with famine. Shortly afterwards Hunter broached this theory to the Viceroy (Lord Lytton) and at his request it was officially submitted and subsequently published. Into the controversy that followed we do not propose to enter. The general scientific verdict on Hunter's 11 years cycle theory appears to have been one of "not proven," and although it is clear that there is a coincidence between sun spots, drought and cyclones, it can scarcely be said that the theory advanced by Hunter established his scientific reputation as firmly as the one he had earned for literary ability. Even Mr. Skrine regrets that his hero should have been led away to issue a challenge in an arena new to his powers and experience. The incident, however, is a good instance of Hunter's good fortune in accidentally coming across a subject at a critical moment, which he was able to turn it to account for drawing upon himself the attention of the world. Another incident connected with this brief visit to India

refers to his share in the employment of Mr. (afterwards Sir) Roper Lethbridge as Press Commissioner. In March 1877 he again returned to England where for the next four years he was employed under the terms of his new agreement in bringing out the great work of his life. These must have been pleasant years. On the sunny side of forty years of age, with a handsome official income, looked up to and respected by the best of London's intellectual Society, blessed in his wife and family, Hunter's career was one well calculated to excite the envy of his brother civilians, doomed to undergo the heat and burden of an Indian life, excluded from all intellectual opportunities and separated for the most part from their families. Before the end of July 1881 the great work was finished and Hunter was able to report to Government the publication of the 'Imperial Gazetteer of India' in 9 volumes royal 8vo. It had cost somewhat less than the £13,000 allotted by the Government of India and was finished well within the limit of 4 years and 7 months. A similar report by Denon and his French colleagues in Egypt had occupied seventeen years and the old Statistical Survey of Bengal ordered by the E. I. Company in 1807 had cost £ 30,000 after 30 years and was never brought to a conclusion. At the end of 1881 Hunter left his family in Weimar and returned to India, but before he arrived there he was to encounter an unexpected shock. In his own words written in December.

"I left Venice with the plaudits of all Europe ringing in my ears, and a personal despatch in my pocket conveying the thanks of the Secretary of State. The first moment that I touched Indian soil at Aden, a letter from the Government of India was placed in my hands intimating that, as my work was finished, my appointment must be considered as no longer existent, and that I was to wait in Calcutta, out of employ until the Viceroy could take up my case. This was a cold welcome, and it opened up a vista of unpleasant contingencies: So I said nothing about it to any one but gave up playing whist for the rest of the voyage, and devoted the time spent on cards to thinking over the position in absolute silence. I soon struck out a line of strategy, which has ended in the discomfiture of my opponents, and will land me before the week is out, a member of the Viceroy's Legislative Council. I quickly perceived that the enemy who had drafted the obnoxious despatch, had acted before he had mastered the

"case. "It abolished my appointment as Director General because the Imperial Gazetteer was finished: But the Resolution of the Governor-General in Council of 8th December 1871 had created the Director Generalship, not for the Gazetteer, but for the Statistical survey of India. The former which held a secondary place in the Resolution was indeed finished; but the Survey, the primary object of my appointment, was still to do over more than half of India. It would have been easy therefore to compel the withdrawal of the despatch, and the reconstitution of my appointment. Indeed it was hard for human frailty to resist the triumph over a jealous clique of plotters. But the silent hours saved from whist gradually suggested a better part."

If Hunter had been lucky hitherto, he was doubly lucky in meeting with so feeble an opponent. The 'better part' he elected was to sit quiet and let things right themselves. "As an ill-treated man out of employ, the Government would have to make its proposals to me; as a man who had insisted on being maintained in his appointment I should have to personally solicit promotion from it." This, of course was the wise course to adopt, and for five weeks he uttered no word, but having arranged his tactics waited for the return of the Viceroy and the Council to Calcutta. He then called upon Sir Rivers Thompson and to use his own words again "remained quite silent with a view to his asking me what post I wanted. When he did so, I replied that as I had been unexpectedly placed out of employ, I had not allowed myself to anticipate the action of Government until I ascertained if I had in any way forfeited its confidence. He of course said that I had not, and that they all felt that I had earned well of the State. So I got my opportunity, left immediately and wrote him the enclosed letters"... Here again we are left with a gap, and after having told us so much we cannot help feeling a grudge with Mr. Skrine for not having told us a little more. Hunter's tactics were successful as they deserved to be. His enemies were not only beaten hip and thigh, but they had the mortification of seeing him—as he had anticipated—gazetted member of the Legislative Council with the permanent appointment of Director General of Statistics, as well as additional

member of Council on an aggregate salary of £3,800! This after 18 years' service of which nearly eight had been spent in England was a marvellous piece of promotion, and one unprecedented in the annals of the service. This appointment Hunter continued to hold for the next six years and for the greater part of this time even his ambition must have been satisfied. Apparently there was no post to which this young Civilian might not aspire, and it is probable that with his wonderful powers of work and adaptability there is no post that he could not have filled with honour and credit. But as far as his official life was concerned his career had reached its zenith. There were two appointments which seemed to be within his grasp—the Foreign Secretaryship or a Lieutenant Governorship. But whether it was the survival of the old official jealousy, or whether it was that Lord Ripon hesitated to promote so young a man to so high a post, whatever may have been the reason, Hunter was passed over, and he appears to have made up his mind to leave his uncongenial surroundings as soon as his period for pension should expire and to spend the remainder of his life in England where his value had always been better appreciated. At the end of 1886 he went home on two months' privilege leave in order to bring out the five last volumes of the *Gazetteer*. During this brief period he formed a connection with the *Times*, and it was probably this connection that finally induced him to retire in the following year. At the end of 1886 he returned to India to find at Aden a letter announcing that he had been appointed to succeed Sir Courtenay Ilbert as Vice-Chancellor of the Calcutta University. In this new capacity Hunter was ready with fresh schemes of progress and reform, one of which was a scheme, now only being taken in hand, of technical education. His project however did not meet with approval, and having in February received the K. C. S. I. he seems to have decided to accept this as the crowning point of his official career. The work of his life, the *Gazetteer*, was on the eve of completion, and in March 1887 he

took six months' leave at the end of which he retired from the service.

And here would seem to be a fitting point at which to leave the career of this really remarkable man, a career, the fascination of which is enhanced by his biographer's treatment. He allows Hunter to tell the story of his life in his own words, as revealed principally in his letters to his wife to whom and to his family he was entirely devoted. An admirable discretion has been shown in the choice of these letters, although, as already hinted they contain some gaps which we should have liked to have seen filled. Hunter's luck did not forsake him on his last voyage from India. He sailed by the ill-fated *Tasmania*, but left her at Suez to come *via* Brindisi, thus escaping the disastrous shipwreck off Corsica which cost the captain and twenty-three others their lives. After some hesitation Sir William resolved to settle at Oxford, four miles from which scholarly residence he built himself a house at Oakenholt where he lived for the remaining thirteen years of his life. Here again we cannot but commend the wisdom of his choice. Endowed with ample means, welcomed in an ancient seat of learning, and enjoying a literary reputation of the very highest, he continued till the close of his comparatively short life to fill a position of usefulness. It is true that he had just fallen short of the highest objects of his ambition, but who will not say that the end of his life is not as much calculated to excite envy as was his brilliant and exceptional career. He finally passed away after only a brief illness in 1900 at the early age of 59, whilst still in the enjoyment of his intellectual powers and reputation, surrounded by the loving care of his wife and family and amidst the comforts of his own English home. Even though he may have failed to realize his highest ambition he found compensation in the career which he adopted in England which a prolonged official life in India would scarcely have yielded him.

There is much more in this interesting volume which we would fain have noticed, but space forbids, and we can only recommend our readers to study the book for themselves. They will there find the record of a happy joyous life, full of successful work, but also one of steady endurance persisting through bodily pain and illness and prevailing over official jealousy and obstruction. It is a story well told, replete with many a lesson which deserves to be taken to heart, and graced by many a good anecdote. Hunter's luck has followed him to the end in having found so excellent a biographer.

J. D. B. GRIFFITHS.

COLLEGE FEES.

PUBLIC opinion on the recommendations of the Universities Commission has been somewhat conciliated by the letter recently addressed by the Government of India to local Governments. On the question of a compulsory minimum fee-rate, however, Lord Curzon is firm in his adherence to the Commission's advice. In fact there has been an impression abroad that he had in this matter committed himself to this view before the Commission was appointed. Any way a compulsory fee-rate is a violation of the freedom of college authorities, and cannot be justified unless there is positive proof that those authorities have abused their freedom and are absolutely unfit to exercise it. Is there such proof?

At the outset a small matter may be cleared up. By the Commission's recommendation, the Syndicate of each University, in consultation with managers, is to regulate the fees in unaided colleges, while Government will do the same in aided colleges, as well as in its own. In Bengal there are many unaided colleges and the Calcutta Syndicate will therefore have a really large power. In Madras the unaided colleges are only three in number,—the Maharajah's College, Vizianagaram, the Rajah's College, Parlakimidi, and the Kerala Vidya Sala, Calicut. The former two, whose fee-income is only about one-ninth of the total expenditure, are obviously maintained by 'rich benefactors' with the express object of giving cheap education and can justly claim exemption from the compulsory fee rule. The last-named institution, maintained by the Zamorin, has a fee-income which, in proportion to its strength, compares favourably with that of any Government or Municipal college, and has no reason to be afraid of a compulsory fee-rate. The Madras Syndicate will not therefore find any occasion to exercise the power which the Universities Commission propose to give it, and we may dismiss all apprehensions of danger from that quarter. This,

however, is only another way of saying that, so far as Madras is concerned, no necessity exists for giving this new power to the Syndicate; and the absence of any such necessity is sufficient condemnation of this part of the Commission's recommendation.

But the largest class of our colleges, the aided ones, come under the control of Government by reason of the fact that they are aided by it; and the Commission advise Government to prescribe a minimum fee-rate in their case. In accepting this advice Lord Curzon, who presents the Commission's arguments generally in a less unacceptable form than they themselves, puts the case briefly thus: minimum efficiency, minimum fees. If this means that the minimum standard of efficiency that the Universities may prescribe cannot be reached unless a certain minimum fee-income is realised, no one will question it. But what is meant is, that those who prescribe the minimum standard of efficiency must also prescribe the minimum scale of fees. This proposition is open to grave exception. But a worse follows. The Government of India go on to say that, efficiency being difficult to measure and its estimation open to dispute, a sort of indirect mode of measuring and estimating it should be adopted: that is, the authorities will, after taking various determining factors into account, arrive at a certain fee-equivalent of the minimum efficiency, and, that being certainly capable of exact valuation, they will say to the colleges that, if they do not raise that fee-equivalent, they will be presumed without further evidence to fall below the minimum standard of efficiency. Every part of this proposition may be questioned. First of all, the circumstances of each college, its locality, the demand therein for higher education, the means of the scholars in general &c., are more likely to receive proper consideration at the hands of the managers than at those of Government, though the latter may be in 'consultation' with them. Secondly, these circumstances vary not only in different places, but in the same place at different

times; and managers can from time to time adjust their fee-demand to the changing conditions, while Government cannot easily modify its order affecting a large number of institutions. Again, is efficiency after all such an elusory thing? Surely the qualifications of the staff and their proportion to the scholars may be definitely fixed. Buildings, libraries, hostels, and other equipments may also be appraised by experts with a fair degree of accuracy. Courses of study and methods of teaching are prescribed for all colleges and cannot be evaded without detection. The results of public examinations too afford a test, however inconclusive, of the general state of colleges. If in all these respects an institution is up to the mark, it may be pronounced efficient. Should, however, efficiency be some subtle quality over and above all these visible marks, surely a minimum fee, however strictly enforced, cannot be expected to secure it. At any rate, the connection between fee and efficiency is not such that a rise or fall of the one can be taken to carry with it necessarily a corresponding rise or fall of the other. A high fee-income, in incompetent or unscrupulous hands, has often been found side by side with comparative inefficiency, while earnestness and wisdom can transmute even a low income into a high degree of efficiency. In fact fees can affect efficiency only through the staff, accommodation, and other appointments; and to secure a certain degree of efficiency it ought to be enough to prescribe a certain standard of these requirements that directly affect it. What prices are actually paid for these requirements, and how precisely the wherewithal is found by the management, are questions that need not concern Government or the Syndicate, if indeed, as may be presumed, the only object of their solicitude is efficiency.

It may be argued that the practice of allowing complete freedom to managers in the matter of fees has been tried and found wanting. As the Commission observe in their report, the state of some colleges is such as to make efficiency of

even a low type impossible. Let it be owned that this is true of a number of so-called colleges. Let it be owned also that the fees levied in certain places are ridiculously low, and that even these low fees are in several cases surrendered wholly or partially as the result of underselling among rival institutions. Let it be further owned that to some extent, though not to so great an extent as some people wish to make out, discipline is lowered by this bargaining about fees, and students are led to fancy that they confer a great benefit on the institution which they ultimately join. The remedy for these evils is not to take away the power of determining the fee-scale from the only persons that can do it with due regard to the varying needs and conditions of the college, but to insist upon an irreducible minimum of efficiency which will make it impossible for managers to indulge in a 'Dutch auction' for fees and unnecessary for them to solicit the patronage of students in degrading ways. If in colleges efficiency has been hitherto neglected, it is because neither the Syndicate nor the Department has ever made it clearly understood that they will not be allowed to fall below a certain standard, and the Department especially has always manifested a great anxiety to increase the number, rather than to raise the quality, of institutions of every grade. In fact Government, which cannot plead a deficiency of fee-income, has failed even to set a good example in its own colleges, for, say the Commissioners, "We were not satisfied with the state of some of the aided or even of some of the Government colleges which we inspected." The new affiliation rules, if worked with reasonable strictness, the periodical visits of the Syndicate and the Department which the Commission propose, and the timely warning and guidance to which they will lead, backed up by the threat of disaffiliation, will amply suffice to bring colleges up to the desired level of efficiency and keep them from falling below it.

The supporters of a compulsory fee rate may now ask, if you think that the standard of efficiency

must be raised and that managers will then find it necessary to increase their fee-income as much as possible, why do you oppose our making that course compulsory which, even were it not compulsory, would be adopted in point of fact? Why do you not welcome it as a refuge from the importunities of poor students? Will it not put underselling completely out of the power of weak-minded managers and thus enable colleges to compete on their merits alone?

The first and strongest objection has already been mentioned. It is based on principle. The power to regulate fees vests naturally in managers and they alone can exercise it to the greatest advantage. It should not be taken away from them except under necessity. No such necessity has been proved, as efficiency can be secured otherwise.

The second objection is based on experience. Even when a fee-rate was compulsory on institutions there was underselling, as Dr. Duncan said in one of his annual reports as Director of Public Instruction. Apart from that, however, it led to malpractices on the part of managers, as will appear from the following extract from the evidence of an experienced Inspector of Schools :

"If the Fee Notification were revived as some of the witnesses would have it, it would lead to undesirable practices amongst managers of schools, such as the maintenance of fictitious fee registers and the tutoring of school boys to give false information to the Inspector in regard to the fees paid by them. In his experience as an Inspector he had come across instances of such malpractices."

The Commissioners are loth to believe this and appeal to the sense of honour of managers. One need not say what value should be attached to such an appeal in the face of the experience above cited.

The third objection is that it will be a great hardship to the poor student and in too many cases an effectual barrier. In the opinion of the Commissioners this is not an undesirable result, as they imagine that poor students of moderate ability

attracted by the offer of free studentships, crowd the college classes and impede the work of instruction in them. This position, founded on gross ignorance and without justification in fact, has been so well confuted by Dr. Banerjee and other critics that a defence of the poor student at this point will be a work of supererogation. Besides, Lord Curzon himself, under cover of making the attitude of the Commission clear, practically denies their dictum and recognises the right of the poor student to higher education. But it does not appear to be sufficiently realised that at present it is the middle and poor classes that take most advantage of the facilities afforded for higher education. They furnish the great majority of scholars at college, for in this country all honourable professions are open only to those that have passed through the Universities. To bar their gates against large numbers both anxious and able to benefit by college training is to aggravate the problems of poverty and discontent which are already causing despair to the friends of this country. The idea of the Universities Commission, in their zeal for efficiency of college work, shutting out the poor student, reminds one of nothing so much as of the budding economist who, having just learned that indiscriminate alms-giving encourages idleness, straightway posts himself at his door and turns away every beggar saying that he ought to work for his livelihood, not reflecting that private charity must go on until society shall have organised workshops and other unobjectionable institutions for the relief of distress, and that meanwhile, though we may chide the wanderings of the vagrant train, we must at the same time relieve their pain.

Some critics of the Commission's report have found an argument against the compulsory fee-rate in the traditional association of poverty and learning in India and sigh for the days when knowledge was looked upon as a holy gift not to be bartered for base coin. But times have changed, for better or worse. Learning is valued now not for its own

sake merely, but for its worldly advantage as well ; and those that seek profit must not grudge a little expense at the beginning. Modern ideals of education, as of life in general, are quite different from the ancient ideals, and colleges and museums do not rise to music in these days as once perhaps they would have done. The much-quoted report of the 1882 Commission has said the last word upon this fond memory of a gratuitous education. "Such effort (towards the raising of fees) is particularly required in India, on account of the traditional sentiment in favour of gratuitous education which still lingers in the minds alike of Muhammadans and Hindus. This sentiment may have much in it that is pleasing, but it is wholly incompatible with any widespread scheme for education of a modern type. The Brahman educated in a Sanskrit *tal* devoted himself to a life that involved in some measure the renunciation of the world, and he might with some show of reason claim a share in the fruits of the industry of others. No such claim can rightly attach to English education, which has a high money value of its own. It is essential that the old feeling upon this point should be gradually and cautiously but completely changed."

Higher education, however, can never be entirely self-supporting, and until private munificence comes forth to take the burden, Government must continue its aid. It may indeed look forward to a time when, by an adequate scale of fees and charitable endowments, colleges shall become less dependent on its direct help ; but that consummation is yet far distant, and Government has in the meantime protected its interests sufficiently by the rule that for purposes of grant-in-aid the fee income of an institution shall be considered to be that which it would have obtained by levying the standard rates, subject only to a reduction of ten per cent.

Ten per cent. however, is a small reduction to make, if it is intended to represent the loss of income due to free studentships, while, if it be remembered that the actual fees levied are lower than the standard fees, it will be readily seen that it is a very inadequate reduction indeed. In the Hindu

High School, Triplicane, which is unaided and which draws its pupils mainly from the well-to-do classes, the percentage of free students is more than 20, and there are a good 5 per cent. besides who are supported by private charity. In colleges and in the mofussil, the proportion of scholars requiring help must be much greater. Europeans do not generally know the real condition of the people around them. 'Anon' in the October *Educational Review* gives an estimate which is in the main just of the condition of the average parent that sends his son or sons to college. By proposing 3 per cent. of free studentships as a sufficient provision for the poor student of 'but ordinary ability', the Commissioners have convicted themselves of perfect ignorance of the class of society that furnishes the great bulk of scholars in the colleges. The scholarship system proposed by the Government of India for the benefit of the poor but able student, however liberal it may be, cannot meet a tenth part of the demands that may be legitimately made upon it, as Dr. Banerjee has pointed out. The endowments too which, in the opinion of the Government of India, ought to provide higher education at a cheap rate for poor boys irrespective of ability, have yet to make their appearance. It would be a blessing indeed if, as Lord Curzon hopes, the stream of private charity in this country were diverted in the direction of educational endowments, and should they really prove adequate to the needs of poor students, higher education in India would be placed on the soundest possible foundation. For these scholarships and endowments will pay the fees of the poor students of each college, which need not then lose income by free studentships as it has to do now. Some educationists are sanguine enough to expect that such endowments will be called forth as a result of the Universities Commission's work. We earnestly wish that this expectation could be fulfilled, but would point out that in that event a compulsory fee rule would be superfluous.

V. S. SRINIVASAN.

THE PROPOSED MUSSALMAN UNIVERSITY:
A REPLY.

THE errors and misconceptions which abound in the article on the 'Proposed Mussalman University' appearing in the last number of the *Indian Review* tend to show that the writer has not studied the subject with the amount of care and attention which its importance demands. Mr. J. Sundararamaiya fancies that the proposed Mussalman University will be exclusive in its nature, with its doors shut against all non-Mohammedans, and goes on descanting on the evil humours which, in such a case, it is likely to foster in its Mohammedan *alumni* towards those of their countrymen who may be strangers to them by race or religion. Probably this supposition of his is based on an inference by analogy from the state of things which obtains in the institutions which the Hindus in our Presidency have established for the education of their own young men. In the Pachappa's College on the Esplanade and its branch institutions in the Mofussil, in the Hindu High School at Triplicane and the so-called Theological High School in Mint Street, none but Hindu boys are allowed to become students; and consequently, perhaps, it is believed that the same is the case at the M. A. O. College of Aligarh and that the same will be the case in the proposed University. This is an assumption, however, which facts do not warrant. The Aligarh College is open to all classes of people alike and some of its most distinguished graduates have been non-Mussalmans. The proposed University will be based on the same catholic principle and will admit to its manifold advantages non-Mussalmans as well as Mussalmans, without any distinction whatsoever, though like the Christian Universities of the West, it will require its *alumni* to undergo, during their undergraduate terms, a course of instruction in the theology of the community for whose special benefit it is sought to be established. Nevertheless, it must be added that this rule may

not be insisted on in the case of non-Mussalman students who may go in there merely for the advantage of its secular training.

Mr. Sundararamaiya deserves the thanks of the Mussalmans for the estimable qualities that he attributes to them of intrepidity and straightforwardness. He is also correct in his estimate of Mohammedan character when he says that it is lacking in the doubtful virtue of adaptability. But he is neither just nor generous in appropriating all intelligence to his own co-religionists. It is true that, as a rule, few Mohammedans attain distinction in University examinations; but this is due to the peculiar difficulties with which their educational course is beset. Distinguished educationists, like Mr. Morrison, Dr. Miller, Prof. Sathianadhan, who have had abundant opportunities of observing Hindu and Mohammedan students, and even Rev. E. Sell who is by no means an admirer of Mussalmans—indeed all our educationists have over and over again borne testimony to the fact that "Mohammedan students are not behind Hindu boys in point of intelligence" and we may safely presume that their opinion has not been ill-founded.

Mr. Sundararamaiya betrays a remarkable lack of knowledge in matters relating to Mohammedan education in the course of his observations. It is a fact, as he says, that no Mohammedan parent thinks it beneath his dignity to send his son to a school where young men of other nationalities also study. It is also certain that Mohammedans do not take to higher education as readily as the Brahmins. But why? It is important to note this, for herein lies the main reason for which a separate educational institution is necessary for the Mussalmans. The Brahmins do not seem to care for anything sacred, if it is calculated to stand in the way of their material progress. They do not mind attending Schools and Colleges where "the first work of the day would be joining in an alien form of worship the effect of which would be to cultivate hypocrisy or hatred of one's own religion." But

the Mussalmans are essentially a religious people, and do not send their children to school before giving them sufficient instruction in their own religion and theology, in order that they may not be easily influenced later on in life by the outside criticism of the tenets of their faith. The deliberations of the M. A. O. E. Conference, held annually in the different centres of Mussalman population, have confirmed this view. It is now decided that unless the leaders of the Mohammedan community make arrangements to give their boys a sound knowledge of their Quran and *Hadis*, side by side with the secular instruction obtaining in ordinary educational institutions, English education will not advance among them to any appreciable extent, despite the inducements that may be held forth in the shape of scholarships such as Mr. Sundaramaiya suggests. This is not a mere theory, but the result of many an experiment that has been tried in the Punjab and the United Provinces. Further, experience has shown that it is not possible to introduce any system of religious education in any institution, unless it is under Mussalman management. Hence it is that the leading Mussalmans of India are anxious to found as many separate institutions as possible for the education of the rising generation of their community.

No responsible Mussalman has said that our existing Universities have failed to impart to our young men a high standard of education. Only the Mussalmans have placed before themselves a higher ideal than the Indian Universities of to-day. They wish to have a teaching University based on the residential system as in Oxford and Cambridge, and in view of the facilities which it will give to their children in studying their sacred lore along with secular subjects, they propose to establish for themselves such a University by their own united endeavours. And even as the students of the Aligarh College have been declared by competent authorities to be superior in physique and character to their brethren of elsewhere, it is hoped that

the world will find the graduates of the proposed University better fitted to succeed in life's struggle than the products of our existing Universities.

We do not deny that "one of the main functions of higher education is to remove racial prejudices and to create that catholic spirit in man which lays aside all religious differences and views the Indian nation as a whole." But it is submitted that this remark applies to the kind of education rather than to the agency through which it is obtained. All higher education, be it obtained from a University training or in any other wise, has the tendency to widen one's sympathies and remove all the baneful predilections of race and creed. In modern India, there are a host of Mohammedan gentlemen, pure products of our antique learning, who, without pretensions to University distinctions of any kind, have yet attained to a standard of culture which has taught them to view the interests of Hindus and Mohammedans as of equal importance; and we believe that such good people are not wanting among our Hindu countrymen. When the old order of things has been found capable of bearing such excellent effect on the character of its savants, is it too much to expect that a University founded with due regard to modern environments will produce at least as good results as the system of education framed at a time when the power and influence of ancient learning were safe and secure? And it is in this view that we are not afraid of the consequences of having the so-called denominational Universities.

Before concluding, it may be interesting to note that the unfavourable remarks of the Indian Universities Commission with regard to the proposal of raising the Aligarh College to the status of a University have only served to stimulate the community to make further endeavours to secure that large amount of financial support without which the proposed institution cannot be brought into existence. Deputations

have been sent to all parts of India for the collection of funds and the results of their labours, as published in the columns of the *Aligarh Institute Gazette* from time to time, are very encouraging. In trying to start a University of their own, the Mussalmans of India are only seeking, in all sincerity and earnestness to spread among their community a high standard of liberal education and enlightenment without which they will never know the value of co-operation with their fellow countrymen for the betterment of their common fatherland. They have resolved upon founding the University as the only means for effectively lifting themselves up from the great depth of poverty and ignorance to which they have fallen in the scale of nations, and it is a serious mistake to suppose that they are actuated by a desire to foster racial Universities and religious differences.

They are merely attempting to carry out the principle of taking up the higher education of their children into their own hands,—the root-principle of the liberal educational policy inaugurated by Lord Ripon and approved of by all friends of Indian advancement. The valuable lessons of "Self-help" and "Self-reliance" have been very often preached to the Mussalmans of India, and it is too much to hope that, in their present endeavours to help themselves towards their material salvation, they will have the kindly sympathy and the substantial support, not only of the British Indian Government, but also of those enlightened leaders of public opinion and thought in the country who have at their heart the consummation of a united Indian nation.

MD. IBRAHIM QURATSHI.

JOHN MORLEY'S LIFE OF COBDEN.

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THE AWAKENING OF WOMEN.*

THIS is, I feel sure, one of the most important books that have been written in this new century and one that will eventually, mark a new epoch in the World's History.

And the reason is that it goes to the very source of things and represents them as they are and not as they seem, and though in reading it we may sigh for the "might-have-been", it inspires us with a determination to make the most of the opportunities that still remain to us.

It places the key of real success and happiness in every woman's hand and empowers her to feel herself a queen, to be loved and courted and obeyed, independently of money, good birth, or beauty and to feel, in very truth, that the hearts and ambitions of men are in her keeping. One of its many apt quotations are the well known lines

Be good, dear maid, and let who will be clever,
And thus make life, death and the great for-ever
One grand sweet song.

It touches reverently on religion and earnestly on politics, without bigotry in the one or party spirit in the other. It speaks most sensibly about education and the bringing up of children, stating the opinion of a well-known authority in this matter, that *Instruction* may be gained in *Schools*, but real *Education* is given in the *Home*.

If this theory alone were more universally acknowledged, and each little girl were taught to strive to be "like mother" and each boy to understand and master his father's business nor profession, how much rarer it would be to hear of the dearth of good cooks, good children's nurses, good needle women and good housekeepers, and how much more seldom we should hear of our sons,—who should be our comfort, our pride, and our support—turning out complete failures a misery to themselves and to all who come in

*The Awakening of Women by F. Swiney.

contact with them! It touches on woman as a *sister* saying. "This relationship truly is one of the brightest and sweetest round which the affections cling. The common joys and griefs of childhood shared by brothers and sisters alike, the happiness of the home life, the mutual sympathies, and the interchange of youthful hopes and aspirations, form a background to most lives, that subsequent trials, triumphs and sorrows can never totally efface from the memory."

"Nor can the influence of a dearly loved sister be overestimated, when a brother re-calls her unselfishness and her unwavering encouragement."

Then it passes on to the attitude of a sister towards humanity, and devotes several pages to teachers and nurses, besides giving short sketches of the lives and work of many of our great women philanthropists.

It dwells deeply on woman as an ideal wife, and more deeply still on the all-important, healthy, intellectual loving and sympathetic *mother*.

"Youth fades; love droops;

The leaves of friendship fall;

A mother's secret hope outlives them all."

Thus poets, the philosophers of antiquity, historians of all ages and modern men of science are quoted constantly throughout when their opinions bear on the subject in question, and it is a book I hope to see translated into every language so that every woman may be able to read it, or have it read to her in her mother-tongue.

Nor does the author omit to give the testimony of various sons of which the following are instances.

"Thomas Carlyle unreservedly ascribes to his mother's refined and intellectual mind his first impetus towards literary study."

"Garibaldi, the liberator of Italy thus speaks of his mother's influence of his life: "I declare with pride that she was a perfect model of a woman. If there is any good feeling in my nature, I distinctly declare that it is from her I have derived it." "All that I am and all that I can hope to be,

I owe to my mother" was Lincoln's tribute to his mother's influence."

The opening words of the preface state "to the few millions of women who think, and to the many millions who do not, I dedicate this book. I have written for the crowd, not for the student, and have avoided as much as possible technical and scientific phraseology and long columns of statistics."

There are many other passages I should like to bring to notice, did space permit, but must content myself with one more quotation.

"The motherhood of humanity has reached a higher stage of development, with greater responsibilities imposed by a greater knowledge.

In motherhood lies the future formation of a higher type of race, of stronger physique, of purer morals and of greater spirituality.

"Mourn not for the vanished ages,
With the great heroic men,
Who dwell in history's pages
And live in the poet's pen,
For the grandest times are before us
And the world is yet to see,
The noblest worth of this old world
In the men that are to be!"

SARA MACKENZIE KENNEDY.

THE MAHOGANY REVIVAL.

FOR a considerable time and until some years ago, there was scarcely a wood which was more fashionable or more in demand for furniture, house building and other purposes than mahogany. Latterly, however, it was temporarily driven from its place by teak, walnut, maple and other less excellent yet showy woods. Then it became a drug in the market. The tide soon turned though and real sterling merit again asserted itself, with the result that mahogany is once more to the front and is almost being "boomed." In England and America, there is a brisk and growing demand for it for various decorative purposes. All grand houses and mansions are taking to mahogany doors and inner fittings and as examples, I might mention the Naval and Military Club in Piccadilly, and Moray Place and Abercromby Place, in

Edinburgh, where may be seen splendid specimens of mahogany doors and pillars. In the United States, the wood is largely used in the shape of veneers for decorating Pullman and other cars and also the palaces of Yankee millionaires. As to the prices which are paid in the States for the wood, it may be mentioned that some years ago a single log of African mahogany was bought in Liverpool for the Pullman Company for £408. And yet, just a few years previously, African mahogany was absolutely unknown in the European or American timber markets. The figure just mentioned as having been given for a single log, is however, not to be compared with the £3,000 which, it is on record, Messrs. Broadwood paid, somewhere about the middle of the last century, for three logs of West Indian mahogany each about 15 feet long and 38 inches square and the wood of which was extremely beautiful and capable of taking the highest polish.

It is not surprising that mahogany is regaining the place it once held and which was usurped by the timbers above mentioned. Teak is hard and cold beside mahogany, and is moreover needlessly heavy. Walnut is wanting in the richness of its older competitor, while maple would be altogether out of place in the realm of fashion. There is also a warmth in mahogany, and an elegance which perhaps no other wood can approach. And added to all this, mahogany is remarkably durable. It is recorded that the timber of a Spanish line of battleship built at Havannah of the finest picked wood, when captured by the English, and broken up more than hundred years after she had been launched, was found to have every timber sound. This circumstance suffices to prove the intrinsic fitness of mahogany for ship-building purposes, and yet it is only classed in the second rate at Lloyds, the reason being that fine dense mahogany is too costly for the purpose, while the cheaper Bay wood or Honduras comes only in the second division.

The finest description of mahogany is that known as Spanish. It is chiefly imported from San Domingo, Central Mexico and Cuba. The Honduras variety is obtained from regions further South. In the trade, several varieties are known, such as Jamaican, Columbian, Guatemalan, Honduras, Nicaraguan, Minatitlan, Mexican, Tobasco, Tecolutta and African, and reference to trade journals shows that business in almost all these varieties is generally brisk.

The timber does not appear to have been imported into England earlier than the first quarter of the eighteenth century. As for India, it was brought over here for cultivation in the closing years of

the same century, and trees planted then or some years later may still be found here and there in different parts of the Peninsula. Early experiments showed that it would thrive in most parts of this country, the only drawback being its great reluctance to seed. Mahogany was introduced into the Madras Presidency early in the last century, and I believe that some of the trees sown during the early years of the experiments may still be found thriving. The Madras Forest Department has been working systematically these past several years to stock our forests and plantations with the tree, and the results have certainly been very gratifying, for varieties are growing healthily in South Canara, Malabar and Vizagapatam, especially in the second named district, where seedlings put down from 1890 to 1894 have attained from 20 feet to 42 feet in height, the average yearly growth being a foot in height and an inch in girth. It may be noted that the average girth of teak at 90 years of age is about 6½ feet, so that mahogany at that age would give a far more favourable girth. The mahogany plant is by no means easy to tend in its infancy. Until about three years old, it wants good shade. The top shoots of the young plants are also liable to be attacked and injured by insects. Weeding has to be carefully attended to, and occasional manuring is necessary.

Indian mahogany has been found equal in quality to some of the best varieties of Honduras, although inferior in fineness of grain and curl to the best qualities of "Spanish" wood.

About 40,000 tons of mahogany timber are annually imported into Great Britain alone from the West Indies, and prices are almost always very remunerative to sellers. With the experiments in India proving so successful as they have done so far, and with mahogany occupying its former leading position in the Home market, it may be hoped that this fine old timber will in the course of time become a source of great and regular profits to this country. Indian cabinet makers and joiners also could turn the wood to good account and establish, with sufficient enterprise, a new and lucrative industry that would afford a useful and profitable livelihood to large numbers of artisans and labourers.

MERCANTILIST.

We have received from Messrs. P. S. King and Son, a copy of the Second Edition of "Elements of Statistics" by A. L. Bowley. The first edition of this book was reviewed in our columns in February last and it speaks to its merit that it has soon gone through another edition within a comparatively short period.

PROFESSOR BOSE'S NEW BOOK.

Messrs. Longmans, Green and Co., have published a scientific work by Professor J. C. Bose, B. Sc., London, of Calcutta University, which under the simple title of "The Response of Matter," * establishes the very startling truth that what we call dead matter can be proved to be alive! He does not go so far as to suggest that a piece of steel has either sex or soul, or heart or mind, or consciousness. But he does prove that inorganic substances are capable of feeling to an extent which enables them to make that distinct and registrable response to external stimulus which has hitherto been regarded as the distinctive sign of life. The following account of the discovery of Professor Bose, written by a competent hand appears in the *Review of Reviews* for October.

Ever since the birth of modern science men have been fascinated by the difference between the organic and inorganic. The mystery of life, and pre-eminently of animal life, has attracted as many inquirers as ever did the quest of the philosopher's stone. For it seemed to imply a far greater miracle. Its myriad individuality, its eager movements: its peculiar forms: its growth of large from small, and back to embryo again; its persistence of species combined with its rapid evanescence of individuals: above all, its possession of consciousness, rising into thought and knowledge—these and other characteristics make up a phenomenon, so complex and stupendous in its seeming unlikeness to all else in Nature, that in the first enthusiasm of science, living things were inevitably assigned a place by themselves and a terminology of their own.

But alluring as was the task of dissecting the mighty puzzle and putting it once more together, the scientific intellect had time after time to turn back from the attempt which it had already felt was foredoomed to failure. There were plants that moved visibly and animals that never moved at all; and the very existence of the science of organic chemistry is an abiding protest in chemical regions against the arbitrary distinction between living and non-living products.

IF RESPONSE IS A SIGN OF LIFE.

Yet there was one criterion of life which seemed to stand persistently alone. This was the characteristic of irritability, or power of responding to stimulus. You pinch your arm: there is an immediate response in the feeling of pain. In response to the stimulus something is sent along the nerve to the brain which causes the sensation. In fact, we have here something like an electric circuit, the effect of a shock in any part of the body being sent along the conducting nerve to the detecting brain. If an isolated piece of the muscle or nerve be connected with a detector of electric current—a galvanometer—then each time a muscle or nerve is stimulated by a pinch or shock of any kind the thrill of response is betrayed by an electric pulsation. These electric pulses give a faithful indication of the "livingness" of the tissue. When the tissue is killed the electric pulse ceases to beat. We can thus read the history of the life-process autographically recorded before our eyes: we can watch the diminishing pulsation with the waning of life and the final arrest at the moment of death. The up-and-down curve of throbbing life is replaced by a line of immobility at the moment when it passes into non-life.

* The price of this book is 10/6. Copies can be had of G. A. Natesan & Co., Esplanade, Madras.

THEN METAL IS A LIVING THING.

Thus the pulse of electric response is regarded as the criterion between the living and non-living. When it is not found, we are in presence of death or else that which has never lived. A living thing is responsive, a dead thing is not. The living response with the attendant phenomena of sensation were supposed to be due to the working of a mysterious "vital force" which found its dwelling-place in the living.

Alas, however, for human boastfulness! since as the result of the latest discovery it appears that this harmless little arrogance of man eager to believe that his corporeal brain and frame obey laws different from, and greatly superior to, those which govern the mineral world—this seeming innocent morsel of ignorant vanity is about to be refused to us. For, as regards response, the gulf that yawned between vital and non-vital has been bridged, and the bounds of sympathy are pushed into a new domain by proofs that the responsive processes seen in life have been foreshadowed in non-life, and that even metals respond precisely in the same way as human beings!

It is too early as yet to estimate the full significance of such a discovery. The unity proclaimed is far-reaching and marks an epoch in scientific thought.

THE DISCOVERER OF THE LIFE OF METALS.

Dr. Jagadish Chunder Bose, to whom we owe this discovery, is the professor of science at the University of Calcutta.

After taking his degree in Calcutta, he won entrance as a scholar at Christ's College, Cambridge, in the year 1881. His course there ended in 1884 with his taking simultaneously the Natural Science Tripos and the London B. Sc. degree, and he returned to India to receive—thanks to the interest of Lord Ripon then retiring—the Chair of Physics in the Presidency College, Calcutta.

Ten years later his work won the recognition of the Royal Society, which published his paper on the "Determination of the Indices of Refraction of various substances for the Electric Ray." In the year 1896-7 Professor Bose spent nine months in this country on his first scientific deputation from the Government of India. During this period he received the degree of D. Sc. of the University of London in recognition of the value of his research. The scientific world, both in England and on the Continent was greatly interested in his apparatus for the detection and measurement of the properties of an invisible light.

Since his return to India in 1897 Professor Bose's investigating energy must have been redoubled, to judge from its results. It was therefore, inevitable that he should be sent once more to Europe by the Government of India as a delegate to the International Scientific Congress held in Paris two years ago. This was specially due to the great interest taken in the cause of scientific progress by Sir John Woodburn, the Lieutenant-Governor of Bengal. The first account of Professor Bose's discovery—The Responsive Power of Inorganic Substances—was thus announced before the Paris Congress, a full account of which appeared in the transactions of the Congress. Since reaching England he has pursued the many-sided outcome of his inquiry, and his communications have been published in the Proceedings of the Royal Society. In May last year he delivered a Friday evening discourse at the Royal Institution dealing with the responsive phenomena in the living and non-living. He subsequently undertook an intensive inquiry on the response in the transitional world of plants, and

an account of this work has been published in the Journal of the Linnæan Society.

CHARACTERISTICALLY HINDU.

Finally, it is not the least remarkable fact about his great theory of stress and strain that this comprehensive conception should have revealed itself to a Hindu mind. For the doctrine means simply that molecular action is one in all matter, living and non-living. And here Dr. Bose appears to have come, without intention, and working by the most modern methods, on the time-honoured goal of his people's effort. Dr. Bose's discovery is in some special sense the contribution of his whole race. We are told of a certain Madonna of Cimabue's that it was carried in triumph about the streets, and old men in Florence wept for joy that they had lived to see such an advance in the painting of human emotion. Some such relation exists in this case between the regional thought and interest of the Hindu people and this scientific achievement of their fellow-countrymen. For, if the simple ryot in his fields and the grain-seller in the bazaar could but master that technical jargon in which the man of science feels that his ideas must be buried could but understand the concrete picture of the creation which *stress and strain*, suggests they would say quietly, "Yes, that *must* be true!" Surely there are few instances of dramatic fitness in the history of science to parallel this.

HIS WORK ON ELECTRIC WAVES.

It will be interesting to say a few words of Professor Bose's previous work on electric waves, from which he was unexpectedly led to his present line of investigation. It was the English physicist Maxwell, who from theoretical considerations first came to the conclusions that light was a kind of electric vibration to all but a single octave of which the human eye was blind. (Similarly with the ear there are whole ranges of sound inaudible to us; it is probable indeed that certain notes reach the insect, which we shall never hear!) Hertz in Germany was able to produce electric waves by rapid electric vibration, and narrowly anticipated in this Sir Oliver Lodge, the eminent English physicist. It is by means of this invisible light sweeping through space with incredible swiftness in its mighty billows that wireless messages are sent. Thus, with the discovery of electric vibration new realms of radiance possessing wonderful and unknown properties were opened out. Naturally the great difficulty in investigating these rays arose from their invisibility. Some apparatus was required which would serve to detect them. Branly, in France, observed that the shock of electric waves produced changes in metallic particles, by which their power of conducting the electric current became increased. What these changes might be remained a mystery, but it was evident that by this means detectors of electric waves could be made. At first, however, these detectors or receivers proved very capricious in their action but Professor Bose succeeded in producing a type of receiver which was quite consistent in its working. He was also able to construct a very perfect electric wave apparatus with which the various properties of invisible light could be studied and measured. It was the wonderful performance of this instrument that surprised and delighted the leading savants who were amongst his audience at the Royal Institution five years ago. He took various so-called opaque objects—a book, human hair, blocks of wood and so on—and producing electric waves with the help of his apparatus was able not only to show that rays passed through these masses, but also to measure the angle at which the unseen light became bent in its

transmission. With unfailing certainty also the existence of hidden stains within opaque masses was detected by the same means.

"THAT TIRED FEELING" IN METALS.

It was said that the precise nature of the changes made by invisible light on the mass of metallic particles which constitute the receiver remained a mystery. In practical application this fact had a grave drawback. After receiving a signal, the detector would become fatigued from the strain, and a tap had to be given to revive it. The whole thing went by rule of thumb. If the receiver was to be made more sensitive so that messages could be recorded from a greater distance and with greater speed, it must be self-recovering so as to do away with the contrivance of tapping. To bring about any improvement, therefore, it was clearly necessary that the theory of the receiver should be properly understood.

In the course of a lengthy research, in which a very patient and wearisome investigation had to be made of all the elementary substances, Professor Bose lighted on several which exhibit self-recovery, and of which therefore receivers could be made which would require no further tapping. He came to the conclusion, indeed, that the whole question was one of overstrain. This is seen on some materials like lead wire, which become easily overstrained, while others, such as a steel spring, exhibit greater elasticity, and, therefore more easily recover from the effect of strain.

SENSITIVE ARTIFICIAL ORGANS.

It was while working on his theory of the effect of external stimulus on matters that he was led on to a new line of investigation, the outcome of which was the construction of artificial organs which simulated the action of our sense organs. These artificial instruments transmitted the impression received from without to be recorded by suitable electric recorders, just in the same way as our sense organs, the eye, for example, send in messages received from the outside to be recorded by the brain. It is hardly to his mind a question of similarity, but rather of identity.

For what is the distinctive characteristic of life? Is it not the power to respond to external stimulus? We pinch or pass an electric shock through the arm, and a visible twitch shows that the muscle is still living. A dead body does not respond when pinched or shocked; the sudden twitch is thus an indication of life. Physiologists make the twitching muscle record its autograph on a travelling strip of paper, and the autographic record tells the history of the muscle, the story of its stress and strain. When it is fresh the writing is bold and strong, as fatigue proceeds it becomes indistinct, and when the muscle dies the record comes to a stop.

These are, however, but gross indications of the vital condition. There are other and subtler processes which cannot be so easily detected. Nervous impulses, for instance, are transmitted without any visible changes in the nerve. Yet when a flash of light falls on the eye, something, is sent along the optic nerve to the brain, there to be interpreted (or recorded) as visual sensation. This visual impulse, produced by the stimulus of light, is an electric impulse. Whenever a shock or disturbance impinges upon a bundle of receivers in the human body an electric thrill is produced and courses along the nerves, which are but telegraphic wires to the central station, the brain.

THE NERVOUS SYSTEM OF METALS.

These electric pulsations are regarded as the signs of life. External stress, like light and sound, gives rise to them, and the electric currents thus set up excite the

brain and cause sensation. But when any organism dies, accidentally or otherwise, the living mobility of its particles ceases, the stress pulses can no longer be sent along the nerves, and there is an end of response.

The electric twitch in answer to external stress is thus the perfect and universal sign of life and the autographic records of these electric twitches show us the waxing and waning of life. Their gradual decline shows the effect of fatigue, their exaltation, the climax of artificial stimulation, rapid decline, the anæsthetic action of chloroform, total abolition, the end of life. But is this electric response, the sign of life, entirely confined to what we call living things? Is it quite wanting in what we know as the inorganic? By means of Dr. Bose's instrument this question can be answered definitely, for when the metals were stimulated by a pinch they also made their autographic records by electric twitches, and thus being responsive showed that they could in no sense be called dead! Nay, more, it was found that given the records for living muscle, nerves, and metals, it was impossible to distinguish or record from the other. For the metals also, when continuously excited showed gradual fatigue; as with ourselves, so with them, a period of repose revived their power of response, even a tepid bath was found helpful in renewing vigour; freezing brought on cold torpidity, and too great a rise of temperature brought heat-rigor.

METALS CAPABLE OF DEATH.

It is said, however, that the ultimate sign of life is inevitable death. An animal is living as long as it is capable of dying. It is true that death can be hastened by poison. Then can the metals be poisoned? In answer to this was shown the most astonishing part of Professor Bose's experiments. A piece of metal which was exhibiting electric twitches was poisoned, it seemed to pass through an electric spasm, and at once the sign of its activity grew feebler till it became rigid. A dose of some antidote was next applied, the substance began slowly to revive, and, after a while, gave its normal response once more!

But if the inorganic be indeed touched with this glimmer of living response then it ought to be possible to construct artificial organs of perception. Of all the organs we possess none is so wonderful as the eye. Professor Bose therefore turned his attention to the construction of an artificial retina which would respond to light. But this particular organ has one advantage over the human eye, inasmuch as its sweep of vision is practically unlimited, detecting waves of to us invisible as well as visible light whereas we are confined to a single narrow octave.

HIS ARTIFICIAL EYE.

It was while he was striving to interpret the hieroglyphic records of his artificial eye that Professor Bose came upon certain hitherto unnoticed and extraordinary phenomena of human vision. For if the action of the artificial corresponded with that of the real eye then the peculiarities of both must be present in each. It may be said that according to the stress and strain theory, the sensitive elements in the retina respond to light simply because they are strained or disturbed by it, as a wire is strained by twist. Just as on the removal of twist the wire continues to vibrate, so do the strained particles in the sensitive retina go on oscillating, and thus send pulsating currents to the brain. These pulsating currents, again, cause a pulsating visual sensation. For, if one look at a bright object, then shut the eye, the bright object looked at will appear and disappear several times in succession. These

"sight echoes" are very persistent, and form the incipient stage of the process we call memory.

WHY WE HAVE TWO EYES.

Another fact discovered from the clues given by the artificial retina is that when we look at any object the two eyes do not, at any given instant, see equally well, but each takes up the work of seeing and resting alternately. One falls asleep, as it were, while the other is waking to its maximum consciousness and then *vice versa*.

Thus Professor Bose was led to the paradoxical statement that under certain circumstances we can see much better, with the eyes closed than with them open. To prove this it is only necessary to look at the light through a modified stereoscopic apparatus in which instead of photographs, we have placed two different inscriptions.

On looking through this one finds the two images superposed making a blur. But on shutting the eyes the tangled writing is unravelled and the constituent parts of a sentence are read, clearly by the brain.

Thus sight lends itself to interpretation by the process of strain and self-recovery amongst sensitive atoms, and what is true of the complex organism of the eye is found common to all nerve, all muscle, and to that matter which we long thought of as lifeless and insensate:

A VAST NEW FIELD OF INQUIRY.

It will be seen by the least scientific leader that these experiments teem with significance, not only do they completely destroy all barriers of a hard and fast kind between the responsiveness of the organic and inorganic, showing that the one is merely some greater complexity of the other; not only do they impress us profoundly with the mystery of the sensitiveness of all things, but they are full of practical suggestions alike for the worker in wireless telegraphy and for medical science. In the last field they are of vast importance. For the effects of drugs have been hitherto capable of only vague experiment, while here we have an opportunity, suddenly opened to us, of arriving at the clearest data with regard to fundamental processes, quantities, and the rest.

THE ALL-PERVADING UNITY OF THE UNIVERSE.

Yet every step in this vast simplification—making them all appear as various rhythms and harmonies of a single fundamental sequence—only drives the question deeper—"Who is He that sits within, striking the molecules this way and that? Or what is he, pure, free ever the Witness. Who interprets the records of strain, using the brain as his galvanometer, and discarding alike the laboratory and its instruments when these no longer please him? Dr. Bose does well to end his lecture, given at the Royal Institution, May 10th, with the striking passage:

It was when I came upon the mute witness of these self-made records and perceived in them one phase of pervading unity that bears within it all things; the mote that quivers in ripples of light, the teeming life upon our earth, and the radiant suns that shine above us—it was then that I understood for the first time a little of that message proclaimed by my ancestors on the banks of the Ganges thirty centuries ago:—

"They who see but one in all the changing manifoldness of this Universe, unto them belongs Eternal Truth, unto none else, unto none else!"

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The World of Books.

HISTORY OF CIVILISATION IN ENGLAND

by Thomas Henry Buckle, 3 vols. Price 3/6 each.
(Longmans Green & Co., London and Bombay.)

This is a welcome addition to Longmans' well-known Silver Library Series. Buckle's work first appeared in two volumes 1858-61. The next year the author died at the premature age of 41. Five years after the author's death a new edition of the work was issued in 3 volumes priced at 24/-. The present cheaper impression in 3 vols. is a reprint of this edition.

Time there was when Buckle's work was greatly appreciated and quoted as an authority. But his fame has died with his generation and latterly, there has been a marked inclination to consign him to the list of antiquated writers. Nevertheless there is much in Buckle's great work which deserves close study and as several readers might have forgotten the purport of Buckle's history of English civilisation we may with advantage give briefly a resume of it.

The work which is primarily a comparison of English civilisation with that of some other countries, involves, in fact, a general survey of the conditions under which civilisation has been developed, checked, or repressed, in all countries. For this purpose Buckle examines the effects produced by climate, food, soil, and the general aspect of nature, on the organisation of society and the character of individuals, and from these he passes on to the circumstances which have influenced the mental activity of the several European nations. The author was thus obliged to analyse minutely the effects of religion, literature, and government on the English mind, and to enter more fully into the history of the English intellect from the middle of the sixteenth century; his conclusion from this analysis being that all improvements are due to the sceptical or inquiring spirit, to which the clergy were, for the most part, strenuously opposed.

Buckle then sketches at length the history of the French intellect during the same period, the chief point of difference according to him between the two nations being found in the protective spirit which prevented the French from becoming free. To this cause he traces the failure of the Fronde, while the weakness of this spirit accounts for the success of the Rebellion in England. The reaction against this spirit in France issued in the great

Revolution, with which the eighteenth century drew to its close; and the proximate causes of this change are therefore traced out, and are found to resolve themselves into an increased knowledge of natural phenomena.

The remainder of the work is taken up with an examination of the history of the Spanish and Scottish intellects. Before entering on this part of his task, the author had, as he conceived, established the following propositions:—(1) That the progress of mankind is measured by their knowledge of physical laws; (2) That such knowledge must be preceded by a spirit of scepticism, which, at first aiding the investigation, is afterwards aided by it; (3) That the discoveries thus made increase the influence of intellectual truths, and diminish (relatively, not absolutely) the influence of moral truths; and (4) That the great enemy of civilization is the protective spirit, by which term is meant the notion that society cannot prosper unless the affairs of life are watched over and protected at nearly every turn by the State and the Church. To the absolute predominance of this protective spirit in Spain the author traces the paralysis of Spanish intellect and energy; for this spirit fostered superstition, and superstition strengthened ignorance, which in its turn shut out the only means by which another state of things could be brought about.

MEMOIRS OF PRESIDENT KRUGER.

By this time the two volumes of the Memoirs of the late President of the South African republic will have been published in England.

These memoirs, which were dictated by Paul Kruger to his Private Secretaries, give the whole story of his life from the earlier experiences of childhood, his boyhood, early treks, hunting exploits and so forth, right up to the present day with its sterner record of controversy and war, on which latter, subjects the ex-President speaks, from the Boer point of view, with authority, and not as all other writers have done, with conjecture and hearsay.

There is much new light shed on the Jameson Raid and the beginning of the evils which befel the land, and incidentally the author contributes important opinions on the burning South African questions of the Food Tariff, Native Labour in relation to the Mines, the Dynamite Monopoly, and the Railway Tariff. The whole narrative is practically a new and powerfully written History of the Transvaal.

Mr. T. Fisher Unwin is the publisher. The price of the 2 vols. is 30 shillings. Orders for the book are being registered by Messrs. G. A. Natesan & Co., Esplanade, Madras.

THE HEART OF THE EMPIRE (*Mr. T. Fisher Unwin*).

The book the Second Edition of which is before us is a collection of essays discussing the problems of modern city life in England. The several writers that deal with such questions as *The Housing Problem*, *The Children of the Town*, *Temperance Reform*, *Distribution of Industry &c.*, deal in no dogmatic spirit with the subjects albeit they come equipped to the task with first hand information. 'Some of the authors have lived in settlements; some in block-dwellings; others have been brought by voluntary effort or the demands of business into direct contact with the districts abandoned to the labouring classes.'

As to the perennial interest of the subjects there can be no question. The poor, as one who came with a message to them said, we have always with us. The rich are as much objects of our solicitude as in the days of Burke. Any discussion that tends to make the lives of people embracing both the ends of the social scale really happy must be welcome. All public men interested in social questions will find information and guidance in the study of the Essays.

The general reader will find the last three Essays those dealing with the Church and the people, Imperialism, the Past and the Future specially interesting.

The question of imperialism is of special interest to us in India. According as the view taken of it is elevated and unselfish or one tending to national glorification will the interests of the dependencies be well looked after or neglected. What dangers beset this imperialism Mr. G. P. Gooch has well exposed. We have come across no saner statement of the shady and the bright side of this movement. The writer recalls the teaching of Seeley and commends it to the Expansionists: "Where our flag flies over willing subjects and the institutions of self-government our rule may count on grave reserves of moral and material strength; where it does not, our material strength may be great but the moral basis is either weak or totally lacking." All the unlovely aspect of expansionism, its deadness to morality, its national self-conceit, its lack of imagination, insight, its impatience of criticism, is well brought out. What the writer says about the civilising mission of European nations is good enough to be copied: "Our certainty that we are the finest flower of civilisation and that the future rests with us may be well grounded; but we need to bear in mind that a precisely similar conviction is entertained by other nations in regard to themselves. At the

zenith of the Spanish Dominion Campanella wrote a famous work asserting the moral and political right of Spain to the supremacy over mankind. In our own day Victor Hugo declares France "the saviour of nations." Villari echoing the illustrious Gioberti, claims for Italy the primary among nations. The Kaiser tells his people "Der alte gute Gott has always been on our side." M. Pobye dostseff points to the freedom of Russian from the shibboleths of a decadent civilisation, and looks to the young and vigorous Slavonic stock as the reversionary legatee of the treasures and conquests of the past. The Americans are not less confident than in the days of Martin Churlient that it is their mission "to run this globe." The Boers, we are often told, regard themselves as the chosen people. Nor is this belief confined to the white powers, for we find it in undiminished intensity among the Chinese, to name no others." We are afraid that what Mr. Gooch says about South Africa will not be found palatable to the admirers of Mr. Chamberlain. But there is some good in having men who will remind our empire builders that they are mortal and have something to amend in their ways.

There are many other good things which it would take too long to dwell on. We commend the book heartily to our readers.

ELEMENTARY TEXT BOOK OF ZOOLOGY

by *Arthur T. Masterman, M. A. (Cantab)*, 2nd Ed. 1902 E. S. Livingstone Edinburgh. 12s.

The book, originally published in 1901, has now reached its second edition. The book is intended, we presume, for the benefit of those appearing for the various medical examinations in the University of Edinburgh. As the author himself remarks, "there is a very definite limit to the introduction of new features of classification, or even of new types," in a book of this kind. And the first part of the book goes into the general principles of Zoology and will, no doubt, prove of great use to the beginner. The second part deals with the principal groups of the animal kingdom. Types of a phylum are briefly described, and the description is followed by a short account of the characters and classification of the phylum itself. The book is illustrated by a large number of excellent original figures. On the whole, we think the book cannot but prove useful to those for whom it is intended.

THE VEDANTA AND ITS RELATION TO MODERN THOUGHT. By Pandit Sitānāth Tattavabhushan, Calcutta. (Cloth bound. Price 1 Re. 8 as. Copies may be had of G. A. Natesan & Co., Esplanade Madras.)

Last month we reviewed Mr. M. S. Tripathi's interesting book entitled "A sketch of the Vedanta Philosophy." We have since received Pandit Sitānāth Tattavabhushan's book. The author does not require any introduction to students of Hindu Religion and Philosophy. His books on 'Hindu Theism' have won for him high reputation. In the volume under review he has collected a course of six lectures delivered sometime back before the Theological Society, Calcutta. The following are the subjects dealt with, (1) The Vedanta as Scripture and Philosophy (2) The Vedantic Doctrine of Inspiration and Revelation (3) The Vedantic Philosophy of Nature (4) The Vedantic Philosophy of Spirit (5) Shankaracharya and his unqualified Monism (6) How far is the Maya Theory Vedantic?

The scope of these lectures and the method of exposition adopted in them cannot be better explained than in the following words that occur in the first lecture :

"As an ancient system, as a system of religious thought and practice that has profoundly influenced and is influencing the lives of millions of people in this ancient country, (i.e. the Vedānta) is justly engaging the thought and industry of eminent scholars both here and in the West; but it seems to me that it is a system which can satisfy, as it really is satisfying, not only those who have been brought up in it from their childhood, who and whose forefathers have breathed in it as in a spiritual atmosphere from time immemorial and to whom the searching scepticism of this most sceptical age are unfamiliar, but even those who have imbibed the critical spirit of our day to the utmost extent, and who, though ever ready to bow down to the dust before the majesty of truth when it conquers their intellects, breathe nothing but the pure mountain air of free thought and free inquiry. It is with this conviction, and not merely as an unconcerned vendor of religious and philosophical information, that I have undertaken to speak to you on the religion and philosophy of the Vedānta. I will not simply record the opinions of,—the conclusions arrived at by,—the great Vedantic teachers; I shall seek to find out and show you something of the way in which they arrived at these conclusions. I shall, under their guidance, analyse nature and mind in the way they seem to have done, and lay before you the result of this analysis. I shall follow their arguments as best I can, interpret them in the language of modern European logic, and show how far the premises adopted by them bear out their conclusions. I shall see how far the ideals of social and spiritual life preached by the *rishis* and their interpreters bear the light of modern sociology and ethical and spiritual science, and whether those ideals have now become effete and impracticable or still deserve our most steadfast devotion in the face of rival ideals and schemes claiming our allegiance."

THE VIRGINIAN by Owen Wister. (Messrs. Macmillan & Co.)

This is an American colonial romance of the early settlers of Wyoming in the United States. It paints with lifelike vividness the mingled greatness and littleness of the now vanished cow-punchers, those earliest white inhabitants of that part of America.

The author introduces us to the Virginian, the hero of the story, quizzing an old beau of the place. The heroine, Miss Molly Wood, was a woman born and bred amid civilised surroundings. Born of a poor, though ancient family, she accepted the post of schoolmistress in the young colony to escape her mother's importunities to accept her rich lover, Sam Bennett. While crossing a ford, during her journey, the driver of her carriage bungled, and the Virginian, who happened to go there during one of his usual rambles, rescued her at great peril to himself. For him it was a case of love at first sight, while she, hampered by the usual conventions of society, resolved not to lose her heart to him, though he impressed her deeply. Then follows a long wooing, which is described by the author with great delicacy and reserve. He visited her often in the intervals of his work, and this untaught 'gentleman' becomes her most docile pupil and acquired a passionate love for the great classics.

One day he was dangerously wounded by a band of Red Indians and left to die. Miss Molly came across his insensible body, and brought him home and slowly nursed him back to life. His noble nature then won her love and they became engaged. Meantime an enemy of his, Trampas by name, seduced some of his adherents, and began the lucrative trade of cattlelifting. That portion of the story where these daring cattlethieves were caught red-handed and were 'lynched' is very interesting reading. Then the Virginian and Miss Molly became man and wife. Though they at first received but scant welcome at her parental home, his irresistible nobility of nature reconciled all her townbred relations and friends to the alliance.

This picture of a simple state of society which was in existence till within a few decades ago is extremely interesting, and the characters are depicted with great skill and delicacy. The book is written in a simple and attractive style, and will well repay perusal.

RALPH FITCH

ENGLAND'S PIONEER TO INDIA.

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Topics from Periodicals.

INDIAN ADMINISTRATION.

The special feature of the October number of the *Asiatic Quarterly Review* consists in the simultaneous appearance of a number of articles having reference to the criticisms of Messrs. Dadabhai, Digby and Dutt on the present system of administration in British India. Of these Mr. Rogers' article deserves notice in as much as it, while disagreeing with most of the conclusions of the triumvirate, admits the existence of some defects in the administration and proposes remedial measures. With reference to the great indebtedness among the agricultural population of India Mr. Rogers observes :—

There never was a time when there was not, and when they did not live from hand to mouth; but it is only within the last thirty years or so that the law of the land has given the money-lender such power as he now has to get them completely into his hands, bind them hand and foot and make of them virtual serfs.

Here Mr. Rogers alludes to the passing of the Indian Limitation Act in 1871 and the consequent disappearance of the immemorial custom of the country by which money transactions between the money-lenders and the ryots were carried on by means of ordinary credit and debit accounts, balanced once a year, on which debts due were recoverable up to twelve years from the date of the last transaction. The excellence of the old system and the evil effects of the new legislation are thus described by Mr. Rogers.

This (old system) gave the parties such ample time within which to make their mutual arrangements that the money-lender became a hereditary banker to the ryot, whose indebtedness ran on from father to son. They were thus mutually dependent on each other for their livelihood, and confidence was established between them which did not require the intervention of the Civil Courts to keep matters smooth. Suddenly, in 1871, in consequence of the passing of the Indian Limitation Law, the period of twelve years mentioned was reduced to three, and the immemorial custom of the country was broken through; the confidence of the parties in each other was at an end, and the money-lenders, knowing three years were too short a time in which to collect their debts in the old desultory way, took to insisting upon written bonds, many of which contained mortgages of their debtors' lands or to promptly suing them in Court.

He next goes on to consider the various remedial measures adopted by Government in the various provinces of India to combat the new evil, such as the Deccan Agriculturists' Relief Act, the Punjab Land Alienation Act and a similar Act passed at Bombay, all of which, he pronounces, in-

adequate and not for the benefit of the country. He also characterizes the recommendations of the Famine Commission in this behalf as utterly impracticable. He would adopt the policy of the dead burying their dead in this matter looking to the future alone, in order to prevent matters going from bad to worse. The following are his recommendations :—

As far as Bombay is concerned—and in any place where the majority of the money-lenders are foreigners, and accordingly disposed, like the Marwaris, not to undertake the responsibilities of landlords—it would be best and probably most in accordance with their own wishes, that the old twelve-years' law should be reverted to, and they should be allowed to manage their money transactions with each other according to the immemorial usage of the country. For past dealings the courts should be allowed, as has recently been legalised in England, to go behind the contracts, and only doored for such amounts as might appear equitable. The alteration in the limitation period need in no way affect other mercantile transactions, with regard to which matters would remain as they are, and the loan dealings between money-lenders and ryots be exempted by special exception. The result would probably be that, if landlords' responsibilities were strictly enforced against the former, a large portion of the land now held by them, but really cultivated by the latter, would revert to its original owners.

He finds panacea for all evils in the establishment of Agricultural Banks by the State providing funds from Takavai advances, in the provision of water and irrigation so as to include navigation for the cheap conveyance of bulky agricultural produce to market, in encouraging the investment of capital in the improvement of the soil by extending the Bombay system that the benefit of all improvements made in his land by any occupant at his own expense is to remain his for ever, and in fixing the instalments by which the land revenue is collected. Of the last he observes :—

Great care should be taken, in fixing the instalments by which the land revenue is collected, to do so in such a manner as to prevent, as far as possible, the necessity for a cultivator to borrow money from his banker wherewith to meet them, time being allowed him to take his crops to market and realize them before the instalment becomes due. In case of remission for a failure of crops having to be granted, it should be promptly given, and the amount struck off the village books without delay. A postponement of payment should be granted very sparingly, and only when the defaulter could look forward to the reaping of other crops to make up his deficiency. There can be no reason to doubt that the plan of postponement of payments has been one of the most common causes for the indebtedness of the ryot, for as long as there is a balance outstanding against him the Village Accountant will not unnaturally persist in pressing him for it, and he will constantly have recourse to the money-lender especially if, as was apparently permitted by a circular order in Madras, power to resort to coercive processes is given to the village authorities.

PEDAGOGUES, THEIR PILOTS, AND THE UNIVERSITIES.

Under this rather high-sounding title Mr. P. A. Barnett writes in a somewhat complaining mood of the neglect of the great educational problems of the day by the last-named bodies. All other organised bodies, chartered or unchartered, have had their say; the Universities alone, whose disinterestedness and credentials could not be questioned, are silent. Hitherto, they have had great influence on the curriculum and teaching of all public schools, but now the innovators are gaining power and using the public machinery for their ends. The result is neither creditable to Oxford and Cambridge nor beneficial to the country. Education Bill now has been shaped by various classes, and institutions according to their own interests, *e.g.*, the Church, the School Boards, the County Councils. Very rarely has it been handled as "something which concerns man as man, the nation as a nation, society as a living and growing thing rather than a writhing bundle of competing institutions." The efforts of the British Association to set education on a scientific basis will perhaps co-ordinate the diverse and often conflicting interests and evolve a real "Science of Education." After alluding to the diversity of opinion as to the ideal and aims of education, Mr. Barnett refers to the need of regulating the science element in the present curriculum which by its importunity has now absorbed too exclusive an attention. There are many science subjects claiming to be taught to children. Some order must be preserved amongst these. No one can know, much less do, all things. "Together with the materials of education, it is our bounden duty to consider the person to be educated as well. What combination is best for him, and for him in manifold?"

Mr. Barnett is scarcely satisfied with the discussion of educational problems that took place last autumn at the British Association. Each speaker seemed concerned more with his or her favourite subject rather than with the pupil studying it. The future of the child, what we should have him become at the end of the educational course,—this most important point was in the background. Old disputes were raked up and all sorts of false issues were raised and fought over, but this fundamental was ignored. The cause seems to be that the amateur and the theorist are unable by themselves to strike at the root of educational problems. When these specialists of each subject are combined with experts in education, as they were in the subject of Mathematics, the result is satisfactory. The example of America ought to be followed.

There the teachers themselves have sifted the whole curriculum. The work has been mainly accomplished by the famous N.E. A. This Council appointed at different times the now well-known Committees of Ten, Seven, Fifteen, and Twelve, which through several conferences held in different parts of the United States, reported upon various aspects of educational work. In all these bodies experts and specialists were associated together, and their Reports therefore are eminently practical and authoritative. The British Association has not the broad democratic basis of the N.E.A. providing for no reference to a moderating authority entitled to respect at the hands of the profession, it is doomed to be ineffectual. The Universities must organise committees of inquiry after the fashion of the American Committees and supply us with the cream of current opinion.

The general consensus of sound empirical opinions in such matters as politics, morals, and education is good ground. Let us ascertain it. "Science" will, after all, not do much more in this region than find reasons for what has been done off and on since the making of man."

As an indication of the great work done by each Committee in America let us quote Mr. Barnett's description of the work of one of them, the Committee of Ten.

In July 1892, this National Council appointed a Committee of Ten to hold conferences of teachers of each principal subject which entered into the programmes of secondary schools in the United States of America, and into the requirements for admission to college; each conference to consider "the proper limits of its subject, the best methods of instruction, the most desirable allotment of time for the subject, and the best methods of testing the pupils' attainments therein." Each conference was to contain representatives of different parts of the country. A Committee was thus appointed to select members and arrange meetings for conferences, nine in number; members were selected, and conferences met and reported to the Committee of Ten, whose general report, in December 1893, contained a summary and appreciation of the work of the conferences and their several recommendations.

The value of these documents it is impossible to exaggerate. There is nothing exactly like them known to me. The basis of the inquiry is democratic in the best sense, for it consists of the testimony of working teachers and experts; it is not merely official, imposed on the rest of the world by superior persons of none but hierarchical qualifications. Nor was it conducted in the interests of any special study or set of studies, nor were the deliverances of the nine several conferences left sprawling in mid-air; they were brought together on solid earth, considered in one general summary by the original Committee of Ten.

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THE INDIAN RYOT.

Dr. J. Murdoch, LL.D. in the October number of *East and West* sets up a very strong plea for the revival by the British Government in India of Takāvi or the system of State advances to agriculturists which was extensively adopted by old native Governments but which was discontinued by the British Government except in the case of opium farming.

They (Indian ryots) form the great bulk of the population. With agricultural labourers and others dependent upon the soil, they number about two hundred millions—a vast mass of humanity. The indispensable usefulness of their labours is another ground. Without their toil, India would starve. "The King himself is served by the field." Their good qualities entitle them to our assistance. As a rule, they are hardworking; their fields are models of careful cultivation; with a single exception they are frugal; they are honest, holding themselves responsible not only for their own debts but for those contracted by their forefathers. Their weaknesses are another claim. They are ignorant, blindly following custom, or being led by an astrologer. Like the rest of their countrymen, they cannot resist the temptation of extravagant expenditure at marriages. The helplessness of these poor dumb millions should excite our pity.

His chief complaint against the British Government is that it has sought to treat the Indian ryots as educated English farmers while the Hindu and Mahomedan Governments recognized that they had to deal with ignorant Indian ryots. He attributes this to the deep-rooted tendency which there is in the Anglo-Saxon character to anglicise everything with which it comes into contact. English farmers do not receive advances from Government for cultivation expenses. He quotes Mr. Arthur Harington late of the Indian Civil Service to prove that the system of Takāvi advances is the only method exactly suited to the circumstances of the ryots and that it was on that account adopted by all native Governments from the days of Sikandar Bin Bahlol Lodi; he also thinks that Agricultural Banks which it is proposed to establish as a substitute for Takāvi advances though an improvement over the money-lender are open to various objections (1) that they cannot be established on the requisite scale, (2) that there are great difficulties connected with their management, such as want of capital, danger of fraud, distrust of the people for want of Government guarantee, and difficulty about securities (3) that Government could allow much more favourable terms than Agricultural Banks and (4) that only the resources and machinery of Government can fully meet the necessity of the case. For these reasons, he observes,

Instead of attempting to introduce an exotic, whose growth is not very old in its own habitat, would it not be better to revive the cultivation of a plant which flourished for many centuries all over India, and which still prospers in certain parts of the country?

MR. CARNEGIE'S FAMILY INFLUENCES.

In a Scottish home of the kind from which Mr. Carnegie came, writes Hamilton W. Mabie in the October *Century*, there are to be found not only the qualities which command success in affairs, but the higher qualities which weigh and measure success in terms of spiritual value. Among those vigorous, honorable, thrifty Scottish folk, with their keen native sagacity and their equally keen appreciation of learning, of poetry, of the finer things of the spirit, several figures may be recalled: a father endowed with the gift of imagination, poetic in temperament, eloquent in speech, passionately interested in all movements for the betterment of his kind; a mother from the Highlands, with the Celtic sensibility and fire, an inexhaustible store of old ballads in her memory; an uncle who became a foster-father, and who has but recently gone to his rest, feeble with the weight of years but of an unbroken courage and that sweetness which is the flower of a lifelong rectitude and a lifelong cherishing of the traditions, the songs, the spiritual impulses of the Scottish race. One who loved liberty because it is the heritage of brave souls, and who, in the dark days of the American Civil War, stood almost alone in his community for the cause which Lincoln represented; who loved education with the passion of an ardent nature, eager to open the doors of opportunity, and whose happiest hour came when Mr. Carnegie endowed a school for manual training in the Scottish town in which he lived and attached his name to it; whose working hours knew the constant solace of poetry; who taught the boys growing up about him the songs of Burns, the Scottish ballads, and the plays of Shakespeare as they learned their crafts. "I made myself a boy that they might be men," he once said, recalling the days when, as they worked together, they impersonated the actors in the great stories of Scottish history and tradition. A man whose eyes kindled when the old songs were sung, and whose youth came back to him as, with undimmed memory and unspent feeling, he recited the lines which he carried in his heart. A beautiful figure, this old uncle, venerable and yet touched with the spirit which knows not age, in deep sympathy with the upward movement of the world and one in heart with the struggle for larger opportunities everywhere. In the light of the memory of such an ancestry it is easy to understand why Mr. Carnegie has ceased to be an organizer of industry and become an organizer of opportunity, and is now, on a scale unpractised before, transmuting fortune into knowledge, thought, freedom, and power.

THE ORIGIN OF NEWSPAPERS.

In the current number of *Knowledge* Mr. J. Collier essays the task of tracing the origin of species in Sociology. Discussing the wonderful history of the Newspaper press, he says: "The modern newspaper had a twofold origin. It was a continuation of the manuscript letters composed by professional gossips, and circulated in the provinces, as these letters were the expansion and regularisation of family and coterie letters that had been circulated beyond their first destination. It was also an incorporation of the placards from which people all over Europe derived their knowledge of trade, commerce, amusements, and the odds and ends of life. These soon acquired (at least in France) a vehicle of their own—a printed sheet that was circulated gratis or among subscribers, as merely advertising journals, like the *North British Advertiser*, were circulated forty years ago. In course of time the two were amalgamated, and together they formed the advertising and literary halves of the modern journal. The solitary journal produced by antiquity had a similar genesis, yet not quite the same. The circular letter was rather its midwife than its parent, and the poster from which it really descended was not the popular but the official placard. The part that placards or inscriptions played in the old Roman world is well known. They were the chief organ of publicity. There the emperors inscribed their rescripts, the Senate its laws, and the magistrates their decrees; on them the citizens witnessed their piety towards the gods, their devotion to their sovereigns, and their gratitude to their benefactors; religious corporations thus recorded their fulfillment of their vows, and private individuals registered their contracts. They were graven on brass, marble, or stone, according to their dignity or importance. Over 1,20,000 of them have been discovered, and by their means historians have revived the life and reconstructed the constitution, the laws, and the religions of the empire. On walls

whitened with chalk more perishable memorials of the daily life of the people were traced. Not till B.C: 59, when Julius Cæsar directed that the minutes of the meetings of the Senate, and of the assemblies of the people should be daily placarded, do we find any evidence of the existence of a journal. The *Roman Gazette* was this poster reduced to writing. Educated slaves or freed men, many of them Greeks—the ancestors of our reporters—went everywhere in quest of the news eagerly sought for by officials and citizens absent in the provinces. These, it is presumed, were the copyists of the official placards posted daily in the Forum by order of the first and greatest of the Cæsars. By means of the Imperial post the rolls were spread over the vast surface of the Roman world. They were greedily read, and were copiously used by naturalists and historians like Pliny and Tacitus. From fragments of it scattered through Latin writers, Hubner and Boissier have put together that oldest of newspapers, as a naturalist builds up an extinct species. Now mark its evolution. At first solely a report of proceedings in the aristocratic and popular branches of the Roman legislature, as we may call them, it next included the letters and speeches of the emperors and the decrees of the magistrates. A semi-official portion resembling our *Court Circular*, and mentioning such facts as Cæsar's refusal of a crown and the Imperial receptions on the Palatine, was speedily added. Meanwhile, the original *raison d'être* of the journal had disappeared. The assemblies of the people ceasing to be held, of them there could be no report. Then Augustus forbade the minutes of the Senate to be published. Thus the accessory portion of the journal became its sole constituent, and the original design of the Dictator was both defeated and transformed. Out of a bald record of proceedings had grown a fair similitude of the modern newspaper. The name changed with the thing. At first, *The Acts of the Senate and the People*, it became *The Daily Acts of the Roman People*, and was currently referred to as the *Daily*—*diurna* or journal. It lasted as long as the empire flourished, but it was an example of arrested development, and it died without leaving offspring."

CULTIVATION OF INDIAN VERNACULARS.

Dr. B. D. Basu I. M. S. contributes to the October *East & West* an article lamenting the want of Vernacular literature and pointing out how it may be created. He ascribes the want of Vernacular literature to the fact that English is the medium of instruction in Schools and Colleges. He has no objection to English being learned compulsorily as a language; but history, philosophy, and science should be taught through the different Vernaculars. This course has been adopted in Japan with eminent success. The Japanese language was in a far worse condition some years ago than any Indian Vernacular now is; and yet it can boast at the present day of good works in all branches of knowledge. This teaching of all subjects through English, while it has been fatal to the growth of the Vernaculars, has proved a great blessing to England. It has created a market in India for English manufactures. It has enriched the English book-sellers. It has cheapened the cost of maintenance to English firms by giving them native clerks on small salaries. It has made it possible for English officials to get on without a knowledge of the Vernaculars. It has opened up posts to hundreds of Englishmen as Directors of Public Instruction, Professors, and Inspectors. To India, on the contrary, the consequence has been not beneficial. The Indian graduate, having spent his mental energy in the acquisition of a foreign language, loses all interest in literary works about the time of taking his degree. "It is due to this fact, more than to anything else, that Indian graduates have not produced any very strikingly original works." As an instance of the extent to which small causes may affect the growth of all literature, Mr. Basu quotes a high authority. Frederick the Great, in spite of his assiduity in mastering French, made such poor progress that, when he sent his French compositions to Voltaire for correction, that cynic complained that he had to wash Frederick's dirty linen. And French is not so far removed from German as an Indian Vernacular is from English. What is the remedy? It is to create a demand now for works of history, philosophy, and science in the Vernaculars. English being the state language in British India, it is impossible to expect any great change in the system of education. But the case is different with the native states. Why not they make the Vernaculars the media of instruction in all their institutions? Each state or group of states might have its own University, for example the Rajaputana States, the Kathiawar States, and the Central India States. Even Uni-

versities in British India might make the Vernaculars the media of instruction and examination for women. They have no need to enter Government service and can therefore pursue knowledge for its own sake. It cannot be said that the Vernaculars are incapable of expressing scientific and philosophical ideas. They are derived mostly from Sanskrit, and by free resort to the original, they can be made to express the most advanced ideas of modern thought.

THE BAR AS A PROFESSION.

Commenting about the *Prospects in the Professions* in the *Cornhill* for October a writer observes:

The Bar is one of the easiest professions to enter, but one of the most difficult in which to succeed. A good character, a trifling capital expenditure, the giving up of a certain amount of time to the eating of dinners, and such an education as will enable a man to pass a simple non-competitive examination are the only requirements needed for becoming a barrister. But in order to carry off the prizes of his profession a man will want an independent income sufficient to enable him, for some years at least, to suffer a net loss, and for a long period of years to live substantially upon his private means. He will need unremitting industry and patience during all that period. He must have, moreover, important personal qualities—great force of will, absolute self-confidence, the power of concentrated and logical thought, and quickness of reasoning. All these things are of far larger importance than any gift of manner, voice, or eloquence; but even where the requirements which we have specified are present they are wholly useless to their possessor without opportunities. Influence, therefore—by which we mean the promise or probability of future clients—is the chief necessity of all.

But one thing however is needful at the Bar:

A parent, who starts his son at the Bar without interest is starting him upon a struggle of the utmost difficulty, and he should never take this course unless he not only has great reliance upon the capability of his son, but is also able to finance him through the penurious situation which will thereby be created—a situation in which the vast majority of barristers still find themselves long after they have a wife and family.

The Bar has its pleasures and its pains.

And for the man without influence this is particularly hard when it appears that there are now very few solicitors with important briefs at their disposal who have not sons or other relations of their own with a first charge, practically speaking, upon all the work. This circumstance alone has completely altered the relations existing between solicitors and barristers during the last fifty years. Even the plan of falling in love with the "rich attorney's elderly ugly daughter" is not fraught with encouragement, for it has been well said that in our times the solicitor's "elderly ugly son" gets all the Bar. Thus merit in a hundred cases plays but a small part at the Bar.

THE HOUSE OF COMMONS AND THE AMERICAN HOUSE OF REPRESENTATIVES.

"How two radically different social species may branch out from a single stem," says Mr. J. Collier, in *Knowledge*, "is well illustrated by a century's growth of the British and the American constitutions. In the last quarter of the eighteenth century these two were substantially alike. The constitution of the United States is known to have been modelled on that of England, but less, as it might have been observed, in its practical working than as it was theoretically expounded. There were two visible differences, of no apparent magnitude, and from these two small variations descend a whole host of differences that have made the two constitutions as mutually unlike as are the constitutions of Germany and Russia. First, the American Executive and the Legislature were rigidly separated. This was partly intentional, but it involved the absence of the Ministry from the legislative chambers, and this was so far from being designed that, after the constitution came into operation, it was for some time debated whether Ministers should be present in either House. It was decided to exclude them, and the exclusion has reacted equally on the Executive and the Legislature. While the English Executive has gradually become the nation acting, and the English Parliament has been slowly transformed into the nation legislating, the Legislature and the Executive in the United States have year by year been drifting further away from identification with the people. The realisation of abstractions has proved as fatal in politics as in philosophy. The Executive acts like an independent organ. The Legislature has likewise developed along lines of its own. Occult and irresponsible standing committees have bit by bit wrested from Congress the entire power of legislation. In 1790, to obviate some practical difficulties, the House of Representatives assigned the nomination of these committees to the speaker. This innocent-looking provision made that functionary a true dictator. Nor is this all; a second original variation has been as fruitful of consequences. The President of the Republic, the counterpart of the King, had necessarily to be elected, and the method of election gave rise to the nominating convention. The establishment and growth of this convention are held by so high an authority as the late E. L. Godkin to 'constitute the capital fact of modern democracy in America.' Yet there is no record of its origin. Step by step, it laid an iron grasp on all the machinery of government, and nominated the President,

Vice-President, and the federal legislators, the governors and legislators and officers of the States. It was itself then transformed; and, having been omnipotent, it became impotent, surrendering its prerogatives to 'the machine,' which abandons them to the boss. In most of the States, and in all the larger cities, the boss is King. Here is a second metamorphosis which, together with the first, made the working constitution radically different from the constitution on paper, and thus created a new political species."

THE NAIRS OF MALABAR.

In a remarkably well-written article in the October *East and West*, Mr. Alfred Nundy gives his impressions of this unique people. The community is full of surprises and strange contrasts for the observer. Polyandry, once a general custom, is now confined to a very small section, and though marriage is no legal bond, it is none the less faithfully observed. Female education has ever been more common in Malabar than elsewhere in India. The *tarwad*, which is a peculiar form of the joint family system, secures the maintenance of the family property intact and has ministered to the wants of a larger number of persons than it could otherwise have done. The peculiar Malabar law of inheritance along the female line is also described, Mr. Nundy having no strong condemnation of it. He attributes the marriage customs of the Nambudri Brahmins who are held in peculiar veneration by the Nair folk to the desire of the former to maintain their ascendancy in the land of their adoption. For Mr. Nundy believes them to be the descendants of an original band of Aryans that settled amongst a simpler people and shaped their beliefs and customs to their own purposes. Mr. Nundy also holds the Brahmins responsible, as has been already said, for keeping off from the Nairs all notions of a legal marriage as it is found to exist among the meanest tribes by whom they are surrounded.

Then Mr. Nundy refers to the causes that have rendered the Malabar Marriage Act practically a dead letter. The *tali kattu* ceremony he ascribes to the influence of the Brahmins who were anxious to bring them in a line with other communities so far as it was necessary to keep up appearances. The religion of the people is next described, and lastly Mr. Nundy touches none too severely on the custom of the women of going about with their bosoms uncovered. But it is something; this custom is changing.

HOW TO COMBAT ANARCHY.

The place of honour in the *October Arena* is taken up by an article on the subject of Anarchy. The writer is one of the nobler spirits of the day who look upon crime as in some measure the product of our social organisation and seek for its remedy in sympathy and kindness. The law only exasperates. Education is out of the question, for many of the anarchists are intelligent and educated. The church is equally powerless, as in the opinion of anarchy it is the hypocritical ally of their arch-enemy capital. The writer's remedy is the slum settlement which recalls a centre of social health: like skin grafts planted by the surgeon in the midst of sloughing ulcers, from which the healthy tissue gradually spreads until putrefaction and death are checked. Chicago has many such settlements, one of which is called the Chicago Commons. It is in the midst of a Red neighbourhood, like an outpost of order and civilisation on a semi-barbarous frontier. One of its great features is the 'Free Floor' which meets every Tuesday at 8 o'clock. It is a free-for-all gathering, at which large number of anarchists, socialists, and various other stripes and breeds of 'ists' attend. After an entertainment, an address is delivered on conservative lines on some economic or political subject of general interest. After the address the audience are at liberty to ask questions of the speaker who is often puzzled at their variety and difficulty. At this stage there generally is confusion, and the Chairman has frequently to resort to the gavel. After the questions, the meeting is open to short speeches of three minutes' duration. Many of the anarchists take advantage of this privilege, and while some can only rave and curse capital incoherently, others are able to make good use of the short time allowed and succeed in opening new points of view to the open-minded listener. No one is allowed to preach extreme doctrines; all Red talk is strictly forbidden; the freedom of the

meeting should not be abused by incitement to violence in any form. What a lesson in self-restraint and respect for order this rule is, can be imagined by remembering that the crowd is fanatic and ignorant, with no respect for God, man, or devil, and inflamed by the conviction that they are being oppressed by the classes, that all Government is unjust, that anarchy is sacred, and that it is a duty to do violence upon all representatives of Government. The Free Floor is an excellent safety-valve for the discontent of the neighbourhood. It requires no costly machinery. But its chief influence is well summed up in the following passage:

They come to the Free Floor to receive, as they suppose entertainment only; really they are being taught the first principles of good citizenship—principles that they would not accept in any other form. In the first place, they hear the truth of economic and political questions, presented without the distortions of the anarchistic press and platform. They learn to listen to distasteful doctrines in silence; to take their turn in speaking, both giving and receiving respectful attention; to speak to the point; to clothe their vague ideas in concrete form; to restrict their speech—selecting, condensing, and differentiating; to give and receive hard knocks without getting angry; to keep order and submit to authority. What an unconscious schooling in the lessons that are most fatal to the spirit of anarchy!

It must not be thought that the audience of the Free Floor will tolerate any sort of speaker. Success with them requires peculiar qualities. Your ordinary orator will not do there. He must be actuated by genuine sympathy with the suffering of the masses. He must be prepared to admit the numerous wrongs in the social order that require righting. He must never try to blink facts.

They know, even better than he, what the sweat-shop means; for many of them sew the lives of themselves and of their wives and children into clothing for a mere pittance; they know that 20,000 children work in the factories of Illinois, an increase of 39 per cent. in one year, many of them under fourteen years of age, and working more than ten hours; they know that at the "happy Christmas time" of "peace, good-will to men" hundreds of children worked all night in Chicago that their employers might heap up dirty dollars; they know that the conditions of child labor in the factories of some of the Southern States are infinitely worse, a disgrace to American civilization. Of what use for any speaker, however eloquent, to talk to such men of the beauties of "education" and "love"—as I have heard them do—while shutting their eyes to the real grievances that are the tap-root of anarchism?

SWAMI VIVEKANANDA'S CALL TO INDIA.

First comes the vision, then follows the fulfillment. Swami Vivekananda as a prophet and teacher foreshadowed a new awakening for India, a quickening of her pulses, a new light. He held aloft the banner of Truth and Action, and the battle cry of his life was given out in unfaltering tones. Work! It was an inciting call, and his enthusiasm was, and still should be, a source of strength to us all, encouraging us to bring about great results. From the seed sown by him, is springing up a plant, which the youth of India should vigilantly foster, and endeavour carefully to mature. Let us show ourselves to be in accord with his leadings, and help to continue the work bequeathed by him to us, being quick to recognise the needs of our beloved India, and ever ready to lend a helping hand. We must see that no ground is lost by his death; that we in nothing go back; we must feel that religious freedom broadens and not narrows, and strive to maintain the highest ideals of the Indian race.

The Swami came in the great line of march of many heroic souls, in the foot-prints of Rishis and Saints. Every age brings forth philosophers with new attempts to explain the problem of existence, and he embodied the spirit of his age.

These are the opening words of a stirring little article in the latest number of the *Prohita Bharata* from the pen of a "Western Disciple" of the late Swami Vivekananda. The writer thus states the real message of the late Swami to young India.

The Swami particularly addressed himself to the youth of India. He urged them to extricate themselves from the meshes of indolence, in which so many of them were entangled; to find out the meaning and significance of life; to arouse themselves to the realisation of their great possibilities, and see that a progressive future lay before them. He warned them that the world was an enchantress ever seeking to charm them into forgetfulness of the spiritual and eternal realities. As time passes, the pace of progress quickens; everywhere in India new ideas are fermenting.

Then what is there for you to do, you ask? Young men! India wants you! Zealous workers are needed everywhere. Action is the imperative cry! Strong, resolute, loyal, unswerving help in ameliorating the condition of our people and in promoting the betterment of our country. A blight seems to have fallen over our land, which has caused it physically to wither, approaching a state closely allied to suspended animation. Peculiar conditions of the people and country may have concurred to cause the malady, but this weakness of constitution and want of vigour must be remedied, without loss of time. The main requisite is work, knowledge and enthusiasm, and a tremendous confidence in the self.

The soul is a sacred storehouse of heavenly wisdom and truth, and at the centre of every heart. Truth lives. Many of us are in a state of spiritual atrophy, but can be restored to our true nature by exposure to divine light. Concentrate your best efforts to the cause of uplifting humanity by your thoughts and deeds, and let all of us who cling with undying affection to the glorious memorials of the ancient times, and the principles of the noble Vedanta, do our utmost to infuse new vitality and strength into our present apathetic condition, having an indomitable faith in an ideal future. Rise up to the latent potentialities of your nature, display the capacities that shall save the ends you have in view, for human possibilities are of an exalted character in spiritual unfoldment and power.

How rich in promise and opportunity is the period of youth! Standing on the threshold of life, making light of all obstacles on the road, they see years before them, like a country ripe for conquest. What a sense of infinite wealth do the intrepid spirits of youth possess in the gifts of inherent energy and strength, and in the outlook of an unexpended future! Reservoirs of knowledge are within you, and vistas of light, that are yet undreamt of, will stream forth. All living truths must be characterised by intensity of purpose and singleness of mind. Much depends upon yourselves. Who can question that the spirituality of India in the future will greatly depend upon the opinions formed and the work accomplished by the men who are now in their youth? At all hazards, work! Be given to action rather than to contemplation; be practical, instead of merely theoretical; execute, not merely discuss! It is by interior concentration on a desired object, the persistent ability to seize occasions that the highest achievements become possible.

Within recent years, the Western public have shown a marked interest in Sanskrit literature. The publication twenty years ago, of Max Muller's 'Sacred Books of the East' attracted a good deal of attention and introduced the fashion of reading Hindu philosophy, and it was made manifest that the Upanishads comprised an inestimable cyclopaedia of religious teachings and precepts. Since then, the Swami's voices have penetrated the countries of the West, carrying with them the soul-stirring and elevating power of the Vedanta. The propaganda inaugurated so well by Swami Vivekananda at the Parliament of Religions held in Chicago, will be continued by his earnest and devoted adherents, who are vividly alive to the requirements of our country, and also to the self-evident fact that many of the Western people are deeply imbued with the spiritual thought of India, which has produced a profound impression upon them, and a desire for further enlightenment and elucidation on the subject. Thus the seeds sown by Swami Vivekananda and his brother Swamis will germinate far and near into a living faith, singing deep into the hearts of all those who intelligently gave heed to his gospel of truth. In setting forth its teachings let our motto be identical with that of Colenso—"In all things unity; in things non-essential liberty; in all things, charity."

"Strong is the soul, and wise, and beautiful;
The seeds of god-like power are in us still;
Gods are we, bards, saints, heroes, if we will."

DEPARTMENTAL NOTES.

Educational.

INDIAN STUDENTS AT OXFORD.

A new rule has recently been passed by the University of Oxford which repeals the former one relating to Indian students. Two classes of such students will be now recognised, called respectively senior and junior students. The first class includes those who have studied for two years in India passing the examinations preliminary to that course. The second class includes the students of a three year's course who have taken Honours.

The status and privileges of a junior student will be :—

(1) The term in which he has matriculated shall be reckoned for the purpose of any provisions respecting the standing of members of the University as the fifth term from his matriculation.

(2) A junior student shall not be required to pass Responsions, or to pass in an additional subject at Responsions.

(3) A junior student who has passed the second public examination and has obtained Honours either in the first or in the second public examination shall be entitled to supplicate for the degree of Bachelor of Arts, as soon as he shall have kept statutory residence for eight terms.

A junior student who has passed the second public examination and has obtained Honours either in the first or the second public examination shall not be entitled to supplicate for the degree of Bachelor of Arts so soon as he shall have been in statutory residence for twelve terms.

The status of a senior student shall be :—

(1). The term in which he is matriculated shall be reckoned for the purposes of any provisions respecting the standing of members of the University as the fifth term from his matriculation.

(2). A senior student shall not be required to pass any part of Responsions or of the first public examination or any preliminary examination of the second public examination.

(3). A senior student who has obtained Honours in the second public examination shall be entitled to supplicate for the degree of Bachelor of Arts, so soon as he shall have been in statutory residence for eight terms.

No distinction is now made between Anglo-Indian subjects of Britain, and Indian subjects of Britain. They are all exempt from Greek.—*Bengales.*

WHAT IS TECHNICAL EDUCATION ?

Towards the end of his address to the Engineering section, the President, Prof. Perry, thus defined the meaning of technical education :—"In Germany and France, and to a less extent in America, there is among employers a belief in the value of technical education. In England there is still complete unbelief. I have known the subscribers of money to a large technical college in England (the members of its governing board), to laugh, all of them, at the idea that the college could be of any possible benefit to the industries of the town. They subscribed because just then there was a craze for technical education due to a recent panic. They were ignorant masters of works (sons of the men who had created the works), ignorant administrators of the college affairs, and ignorant critics of their mismanaged college. I feel sure that, if the true meaning of technical education were understood, it would commend itself to Englishmen. Technical education is an education in the scientific and artistic principles which govern the ordinary operations in any industry. It is neither a science, nor an art, nor the teaching of a handicraft. It is that without which a master is an unskilled master, a foreman an unskilled foreman, a workman an unskilled workman, and a clerk or farmer an unskilled clerk or farmer. The cry for technical education is simply a protest against the existence of unskilled labour of all kinds."

"EDUCATIONIST" OR "EDUCATIONALIST."

Well, what does it matter? Or, rather, why should one not use either form according to one's taste or fancy, without poking other people with such an inane question? It is a correspondent of the *Daily News* that is in perplexity, and our contemporary does not shrink from giving the preference to "educationalist." The reason is that "it seems to soften the impropriety of the word a little to spin it out." But wherein lies "the impropriety"? Our contemporary seems to make answer when it says: "For our own part, we confess we are among the objectionists as to the manufacture of new hybrid words." By the way, has the word "objectionist," which seems to be equally hybrid, yet been adopted in any reputable dictionary? Both "educationist" and "educationalist" have been so adopted. Besides, the latter word is not "new"; it has been freely used for at least twenty years. And, if the formative "educationist" is not yet naturalized, there will have to be a very extensive weeding of the accepted English vocabulary. It is interesting to recall that Trench regarded "educational"—which is now at least two generations old—as an "offensive, at best a very questionable novelty in the English language." Now it is very much at home. *The Educational Times.*

Literary.

EMERSON ON BURNS.

The late Wyatt Eaton, in the October *Century*, writing of Emerson's sittings to him for a portrait, says :

"When I was alone with Emerson he would address me so directly or talk so interestingly, that work was quite impossible. Turning to me one morning, he said : 'Who is your favorite poet?' He fortunately saved me from answering, for he went on to say : 'Of course, we must except Shakespeare and Burns.' Taking up Burns, he spoke of him as almost as great, and in some qualities as great, as Shakespeare, and continued in this vein until I may say I was relieved by a friend coming in and joining in the conversation, while I went on with my work."

DO WE READ TOO MUCH ?

This is a point raised by Mr. James Bryce, M. P., in a letter to Mr. J. A. Hammerton, the editor of *Our Young Men*, the new penny monthly. Mr. Bryce says, "If I were to tender any advice to young men, it would be to occupy themselves rather with thinking than with reading. The tendency of our time is to read too much, and therefore too quickly and hastily, and rather to substitute reading for reflecting either on what is read or on what one sees of the world."

THE NEED OF LEISURE.

Sir Gilbert Parker, M. P., also has a paper in our new contemporary, in the course of which he expresses the opinion that the danger of our age is that we do too much and think too little. "There is nothing more splendid than energy and force applied to an object with enthusiasm, with an ardent purpose. There is also nothing so good as seasons of passive thought, of apparent idleness, of meditation free from the imp of restless action constantly nudging the elbow."

POETIC ORNAMENT.

"A friendly dispute between Mr. Walter Crane and Mr. Lewis F. Day," the following sentences being extracted :

Lewis F. Day.—How comes it, I wonder, that I, who am at least as much interested in ornament as you, am satisfied with design which you would dismiss as merely commonplace? I am only trying to get at what it is which reconciles me to ornament you will not tolerate. I regard ornament as language only, not necessarily as song, and do not find it tedious when it speaks prosaic common sense.

Walter Crane :—I think the most beautiful ornament does "sing." It fills something of the place of music

—is perhaps an equivalent in some sense. Sense of harmony, fitness, proportion, taste in colour—can you produce ornament, without these, or some of them? These form, perhaps, the "common sense" of ornament or art, at least, important ingredients. Prose may have its place in ornament, as in literature, but in neither need it be commonplace.—*From The Art Journal September.*

ANECDOTES OF WHITTIER.

Among many other things I remember his having told us that he voted for Lincoln four times. At each of the two elections he voted as a citizen, and as a Presidential elector. He told about a man from one of the Western States having made a pilgrimage to Amesbury to see him. Not finding him at the house, he went to the grocery-store, where he was told that he might be found. Sure enough, there was Whittier seated upon a barrel, in the midst of a group of village people, telling stories. The man was so disgusted that he turned and went home without making himself known to the poet.

Whittier was much pleased that I had once attempted to make illustrations for his, "Maud Muller," and that I had some acquaintance with his poetry. Of the "Maud Muller," he told me that he was once driving along a country road with his sister. They came upon a very pretty young girl making hay. They stopped, and he asked his sister to speak to her. While standing before them the girl raked a little hay over her bare feet.

Brightness reigned supreme at Oak Knoll. Whittier was one day making sport of his cousins' difficulties with their bonnets, to which one of them replied : "A man who has to go to Philadelphia to get his coat cut should not criticize women's bonnets."

Whittier's loyalty and generosity were shown by his concern at the fact that I was not also making a portrait of Oliver Wendell Holmes. He was strong in his praises of all of his contemporaries, but particularly of Holmes. "Why," he would say, "Holmes is in many respects, the greatest of us all."

(From "Recollections of American Poets," by the late Wyatt Eaton, the painter, in the October *Century*.)

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PURDAHNISHIN IN INDIA.

A SUGGESTION BY MISS SORABJI.

The following letter from Miss Sorabji appears in the *Times* of September 26th:—

SIR,—The bounds of Empire have been so closely drawn during the celebrations of the summer, that I venture to ask room for a short statement of the position of the least understood of His Majesty's subjects beyond seas.

I refer to the Purdahnishin, or woman who "sits in seclusion." There are in India both Mahomedan and Hindu Purdahnishins. Every Mahomedan woman is necessarily a Purdahnishin. The Hindu Purdahnishin did not exist in ancient India, but is one result of the Mahomedan invasion of the country. Women were secluded in self-defence, and in imitation of the practice of seclusion existing among the Mahomedans. Therefore is it that the Purdahnishin is to be found chiefly in those parts of the country where the Mahomedan influence was strongest—i.e., in the North and North-Western Provinces of India. All but the lowest class of servants are here so secluded. Elsewhere the practice is confined to Mahomedans, and to the Royal or *quasi*-Royal, or would be aristocratic families of the Native States and British India. I will, to keep the question within limits, exclude the Purdahnishin of South India.

Now, the Hindu Purdahnishin had secured to her various rights under the early Indian law. Certain property was hers, inalienably—such, e.g., as came to her through her maternal ancestors or as gifts upon marriage. In other property she had what we may call a life estate—(though her rights of enjoyment are in some instances larger than those of an English tenant for life). These rights are still hers notwithstanding her seclusion. The anomaly is obvious. You gave a woman the rights of an adult person—indeed, until the Married Woman's Property Act of 1882, more rights than English woman had in England; her physical position is that of an infant. (This is, in fact, her position in the law, since the British occupation of India. Her rights are untouched: the protection accorded her is that accorded to infants or lunatics. People who deal with her have to prove their good faith.) Take, for instance the widowed Purdahnishin owner of a life estate in property as large it may be, as an English county. She is generally illiterate even as regards her own vernacular. She may have considerable business powers in embryo, and be possessed of sound practical qualities, or she may not—in effect it makes little difference, for owing to the restrictions of the *Pardah*, she has to act entirely, in reference to the management of her estate, through her (Indian) agent. He is her only door to the outside business world—i.e., he is practically (in the worst case), in the position of sole trustee to an infant of considerable property, living under circumstances where secrecy and concealment are the natural atmosphere. The "opportunity" of darkness and seclusion is always available.

The danger of the position of trust lies naturally in the fact that there is no one to oversee. If the trustee abuse his trust it is primarily and often solely through himself that the women must complain. I have known of one such trustee who made the Purdahnishin sign deeds of gift to himself of almost entire *stridhan*, or private property (what did she know of the contents?); and of

another who made bogus creditors bring bogus actions on a Purdahnishin on bogus bonds, he, as her sole representative never appearing for the defence, so that judgment went against her by default. Of course, in both these instances protection awaited the woman in the Law Courts; but how was she to get her cause there? The cases which do find their way to the Law Courts (and these in themselves would be proof of need), are eloquent of the many more which have no chance of any hearing. When the Purdahnishin is also guardian of a minor who is heir to the Throne (and the mother of a son has the rights of a guardianship, be she even the younger Rani) she is practically ruler of the State, and the dangers and difficulties of her position thicken.

True it is that certain of the widowed owners of property are wards of Court, and there is a Collector or Administrator whose duty it is to attend to their complaints; but such officer is a much overworked official. It is not his sole duty, he has a large district and comes within her geographical area but seldom—say, once or twice a year. At best he sees her blind fold, so to speak, for he may converse through the *Pardah* alone. From the very nature of the limitation, questions of evidence must arise. Is the woman speaking the person she purports to be? Are her statements made of her own free will and without coercion? The woman can never secure secrecy; her adviser can never be sure of identity, and often everything depends on both. Then think of the large number of widowed Purdahnishins who have not even such chance of help as the above. Is it not possible to give the widowed Purdahnishin access to a "man of business" of her own sex, with whom she can speak face to face? She might be attached to the Court of Wards. Department of Government, and work under authority.

I have for sometime been collecting opinions on this subject from such Englishmen as have held office in India and even from present Indian administrators. No one denies the need. Indeed some, chiefly administrators of Court of Wards would state it more emphatically than I have ventured to state it.

Of the "objections," the following is a summary:—

1. Injustice does exist, but we cannot interfere between husband and wife, or with the customs of the country.

2. The need exists, but any reform would be an imputation on the past.

3. We want no more litigation in India; the country is already litigious. Better let the need be.

4. Where will you find your trustworthy and qualified woman of business?

To these we might answer:—

1. So long as we limit any scheme of help to widows and minors the domestic difficulty disappear. It is really only because a woman is deprived of her natural male protector that the troubles arise. And a woman adviser would be no interference with the custom of the *Pardah*, but indeed a conforming to it.

2. Might obviously be rejected.

3. One use of a competent woman adviser would be to save the Purdahnishin from litigation in the numberless cases where now she spends her substance uselessly under the advice of fifth rate mukhtars or vakils.

4. Is the real difficulty of the situation but is not, to my mind an insuperable difficulty. Demand her and you create her.

I leave the question to the brains and hearts of a country which has responded nobly to a similar want in regard to medical aid for Purdahnishins.

Trade and Industry.

THE SUITABILITY OF EAST AFRICAN INDIGO FOR CULTIVATION IN INDIA.

Within recent years a variety of East African indigo, *I. arrecta*, has been introduced into the Dutch Indies, where it is known as Natal indigo, and has been so favourably received that it appears to be displacing all the other Asiatic and American varieties previously cultivated there. It has been proposed to introduce this East African indigo into India on an extensive scale, but to such a course it has been objected that it cannot possibly succeed as well as the present plant, which has hitherto been regarded as the true indigenous variety. As already pointed out this is not so, and the indigo plant now cultivated in Bengal is just as much an exotic as the East African, so that there is no reason why the latter should not now supersede the present Malayan indigo by virtue of its superior characteristics, just as that displaced the earlier varieties. A number of varieties of indigo have been under observation for some time in the Gardens, and the East African has proved capable of successfully withstanding adverse conditions which have been fatal to the others. Thus in September, 1900, very severe floods were experienced which practically destroyed all the Indian and American varieties without harming the East African, and during 1901 the latter was again entirely unaffected by the attacks of an insect pest which killed nearly all the plants of the other varieties. The plant, therefore, appears to be a remarkably hardy variety and merits the attention of the Indian indigo planters.

ARTESIAN IRRIGATION IN QUEENSLAND.

The following extract from the Brisbane *Queenslander* throws an interesting light on the possibilities of extensive irrigation by means of water from artesian bores. "In the central division of the State there is a large tract of country known as 'the desert.' It is of little value for grazing purposes, and, owing to the prevalence of dry seasons, it cannot be utilized in the ordinary way for agriculture. During the last six years various experiments have been carried out of some expense to prove that suitable crops may be grown there by the aid of irrigation. Nature has supplied it with an apparently inexhaustible reservoir of artesian water proved to be suitable for irrigation. The land is easily cultivated, will produce crops in the driest of seasons, and give heavier yields of wheat, oat hay, barley, potatoes, and other vegetables than any other soil we know of in

Queensland. The water from the artesian bores is so pure that it deposits no mineral sediment to injure the soil, as is proved by the fact that for six years the same places have been continuously irrigated without any ill-effects. It is admirable soil for growing any kinds of citrus trees and for vines, as is evidenced by the orchard and vineyard of the Alice River settlement, situated some four miles from Barcaldine, on the Central Railway. An artesian bore in that part of the country will give a supply of about 500,000 gallons per diem. This is sufficient to irrigate at least 60 acres. It may irrigate a larger area than this by judicious manipulation. The cost of putting down a bore at the present time is considerably less than it was a few years ago. Half-a-dozen artesian wells in this country would cost now about £300 each. The cost of irrigating from such a supply is only a trifle, as it is applied by gravitation, the water flowing from the bore into main drains made by plough and delver, and thence by furrow through the ground to be irrigated. The few settlers who have been growing crops in this manner have done well. The seed germinates a few days after saturation of the soil, and if sown in June the hay is ready for harvesting in September. Potatoes and all kinds of vegetables grow well. The latter are sent by train to Rockhampton, where there is a good market for this kind of produce. The Alice River settlers have 15,000 cabbages in their gardens. These were selling in Rockhampton last week at 9s. 3d. per dozen. The main advantage in irrigating is that the crop is always safe. The dry season cannot destroy or injure it. The hot dry climate enables the irrigator to use copious supplies of water, and this in turn produces heavy crops.

MOTORS AND AGRICULTURE.

The motor has been regarded with unfriendly eye by the farmer, but it may be said that it will come to be received by him as an ally. Some interesting trials were carried out by Mr. Albane, of Biggleswade, of a motor designed for agricultural purposes. It is of eight horse-power, and runs on three wheels; and it was shown drawing a mowing machine, performing the work satisfactorily and expeditiously. Reaping and other machines may be attached to it; it may be used for haulage upon the roads; or it can be employed as a stationary engine to drive chaff-cutting, pulping, and other machines. Now that agricultural labour is scarce, it may be that the motor will prove a boon to the farmer, even though it displaces his beloved horses.

At this early stage it is impossible, of course, to compare the relative cost of working, which is the crux of the question. But it is something in favour of the motor that it only eats when it works, and that it can continue its labours as long as the driver wishes; while the speed at which it can travel is greatly in excess of that of the horse.

Medical.**BAD HABITS THAT SHORTEN LIFE.**

One's health may be seriously impaired, and one's life may even be shortened by permitting little mannerisms to grow into fixed habits. There are a score of such mannerisms which are likely to do people serious injury. Such apparently harmless practices as blinking the eyes rapidly, moistening the lips with the tongue, picking the teeth, scratching one's head, or breathing through the mouth, when carried to excess, become very bad habits.

Take, for instance, the common "trick" of moistening the lips with the tongue. If you make a habit of this you will make your lips drier, and render their nerves extremely sensitive. Eventually you will contract permanently cracked lips, which besides being painful and annoying are likely to produce disease. If cancer be hereditary you run a good chance of suffering from it. Why any man should blow his nose when he does not want to is a mystery, but hundreds of people, especially elderly ones, have the habit. It is extremely bad for the nasal nerves and membranes. If done constantly when in health it will, sooner or later, cause chronic nasal catarrh.

STOP THAT BLINKING!

If you find yourself blinking your eyes rapidly without any cause, stop the habit at once, or it will grow into an incurable habit that will make your eyesight fail early in life. Natural blinking is necessary to clear and moisten the eye. The average number of natural blinks is about 20 per minute. But a nervous blinker will wink a 100 times in a minute. The result of this will be excessive development of the eyelid muscles. It also involves a counter irritation, which acts on the optic nerve, and renders the sight daily more weak and irritable. Once contract this habit, and you will find you cannot bear a strong light or read small type, and the eyes will get worse and worse. The symptoms may indicate a need of spectacles.

USE OF WATER AT MEALS.

Dr. Felix L. Oswald of America, insists that the avoidance of water at meals is a mere "sanitary superstition." It is not possible for any normally constituted human being to eat his way to the first quarter installment of a modern dinner of overheated made dishes and greasy viands without experiencing a distinct longing for a cooling dilutant, and before the end of the second

course that craving assumes urgency of positive distress; but the sufferer is warned to forbear. Has not Prof. Orthodox enumerated five distinct sources of peril from indulging that appetency, and proved that the water instinct is wrong, and that Nature knows nothing about it?

The most specious of those arguments is the alleged risk that the introduction of cold water would coagulate the albumen of the ingesta, and thus complicate the labours of the digestive organs. But is it not evident that those organs should be allowed a casting vote in the decision of that controversy?

Dr. Schrodt, the author of "Natur-Heilkunde," holds, on the contrary, that our diet is not half fluid enough and demonstrates that organic warmth will soon reduce over-cold beverages to the right medium, and that a craving which nothing but fresh water will satisfy is a clear proof that the stomach is suffering from an excess of caloric and deficiency of moisture.

Just wait, and that distress will subside, insists Professor O—X. Yes; the subtle chemistry of the organism just as the agony of a famished man will give way to a dull torpor; the system has made another forced loan on the reserve stores of its own tissues, and made the sufferer a little more comfortable, though also a little leaner. Even thus the disappointed stomach will make shift to lead moisture from some other part of the organism where it is less sorely needed and the distress subsides, though a feeling of vague discomfort remains, suggesting that the sort of moisture re-absorbed from the lower alimentary duct is not exactly what the stomach wanted.

LIVES GROW LONGER.

A study of the problem of the duration of life has led to the conclusion that the elder members of a family live sensibly longer than the younger; and that the expectation of life is seriously modified by the ages at death of relatives. Professor Pearson has published a short note on "the changes of expectation of life in man during a period of *circa* 2,000 years." The curve of expectation of life in England in 1871-80 is compared with a curve based on the ages at death of 141 Egyptian mummies, concerning whom these particulars are known. If the comparison is to be trusted, the improvement in modern times is most striking. That a man of 25 years old to-day lives on an average 15 more years than a man of the same age did 2,000 years ago is evidence either that man is constitutionally fitter to survive to-day, or that he is mentally fitter, that is, as the 'British Medical Journal' puts it, better able to organise his civic and domestic surroundings.

Science.

RELATION OF FORESTS TO WATER SUPPLY.

'We may summarise that the position of the forest as a climatic factor is still uncertain, at least as to its practical and quantitative importance, but that its relation to water and soil conditions is well established. As a climatic factor it would appear that the forest of the plain is of more importance than that of the mountains, where the more potent influence of elevation obscures and reduces in significance the influence of their cover; as a regulator of water conditions the forest of the mountain is the important factor; and since this influence makes itself felt far distant from the location of the forest, the claim for attention of Government activity and for statesmanlike policy with reference to this factor of national welfare may be considered as well founded. *Every civilized government must in time own or control the forest cover of the mountains in order to secure desirable water conditions, U. S. A. Agri—Bulletin.*

BLUNDERS IN NATURAL HISTORY.

It is true, said Lord Avebury, at the Nature-Study Conference, that "we have all met persons who have taken a university degree, and yet seem not to understand why the moon appears to change its form, who think that corals are insects, whales fish, and bats birds." It is quite common to hear of "coral insects," though it would be nearer the truth to say "coral anemones." The polyp that builds up coral structures has hardly a single characteristic in common with the insect world. Alas! blunders in natural history err in respectable company.

Perhaps the genial experimenter on ants and bees observed that the author of the introduction to the exhibition catalogue spoke of interesting children in "plants and animals" and other living things." What other? An eminent ornithologist not long ago wrote of "birds and animals," Cowper, denouncing cruelty, remarks that "An inadvertent step may crush the snail that crawls at eventide upon the public path." But, says the poet, "He that has humanity forewarned, will turn aside and let the reptile live."

"My dear poet." Lord Avebury would have said, "A reptile has a vertebral column and a bony skeleton, and though possessing a rather cold-blooded circulation, and occasionally a little slimy—in his habitat—is no more like a snail than a nut cracker is like a steam engine." "Dear me, now you mention it, of course, the snail is not a reptile, nor is a worm, I suppose; I was thinking of the Latin root, 'repo'—I creep." Just so

a fine sample of classical world-building. It is safer in general not to take zoology from the Latin grammar.

These points are very trivial compared with Lord Avebury's main contention that no matter what splendid teachings in science the Universities provide—and splendid it is now-a-days—it will be neglected so long as the great prizes, honours, and fellowships go to dead languages and pure mathematics. And while the Universities pursue this course the public schools will follow suit.

THE MYSTERY OF LIFE.

The mystery of life is rendered more mysterious than ever by the observations which have been made of late concerning the behaviour of certain living organisms under the influence of extreme cold when, as Professor Dewar pointed out in his recent address at Belfast, all such chemical activities as are concerned with vital functions must be in abeyance. Bacteria have been kept at the temperature of liquid air for 20 hours, but their vitality was not affected, their functional activities remained unimpaired, and the cultures they yielded were normal in every respect. The same result was obtained when liquid hydrogen was substituted for liquid air. Seeds have been frozen for over 100 hours in liquid air, with no other result than to affect their protoplasm with a certain inertness from which it recovered with warmth. A research by Professor Macfadyen has shown that many varieties of micro-organisms can be exposed to the temperature of liquid air for a period of six months without any appreciable loss of vitality, although at such a temperature the ordinary chemical processes of the cell must cease. Thus we are brought up at once against a serious question, for although all chemical change was certainly in abeyance at the temperatures to which the cells were exposed, yet life persisted. Is life, then, dependent on structure? And so long as structure is maintained, can it take up the thread again where it was left off? or is life something quite outside physical law which, so long as the instrument on which it plays remains intact, can continue the same tune when once the instrument is unfrozen. The idea that life depended upon continued chemical action, and that although such action in the seed was slow it still went on, has for long seemed to many to be a comforting hypothesis, bringing vital action into line with other manifestations of the physical forces. But that life can stand still, that the whole process can be interrupted, that the living body can be brought down to the inertness of dead matter, and that then with the re-application of warmth it can go on again as before, is a startling proposition, and drives us to the conclusion that, after all, life is not entirely a matter of chemical change. Whether structure is the key-note, whether, like a watch, protoplasm will "go" when wound up; and whether heat is the winder, are deeper questions which at present are incapable of solution.—*Hospital.*

General.

THE POOR FOR THE RICH OR RICH
FOR THE POOR?

In the course of the discussion which has been taking place in Japan as to the taxation of foreigners, it was pointed out in the *Japan Advertiser* that society in Japan is based upon a principle directly opposed to that which prevails in the West. In the West the poor live for the sake of the rich; in the Far East the rich to a great extent live for the sake of the poor. For example:—

"In the West poverty entails upon its victims the necessity of paying the highest prices for food and fuel. Coal bought by the basket makes the price per ton excessive. In Japan the buying in small quantities is to a certain extent regarded as evidence of a lack of means, and, therefore, the purchaser is entitled to the utmost consideration and the largest possible discount. Asking the price of a certain article, a figure was named to us. 'How much by the dozen?' We then inquired; instantly the price was greatly advanced. Our question was plain evidence of superior ability to pay, and the tax was therefore levied. It was no extortion. In Japanese eyes, their system is simply an equitable mode of taxation. The rich pay the high prices that goods may be offered to the poor at the lowest possible rates."

The writer then goes on to point out that the working of this principle is seen in the small holdings of land, indicating that landed property was the possession of the many, and not the privilege of the few, which view the land laws seemed to support. There were severe penalties for violating the laws and selling landed property, and the poor were in this way guarded against the fate of becoming dependent. The relations of employer and employed, landlord and tenant, were governed by the laws to such an extent that the latter's interests were always most carefully looked after. Evictions were almost unknown, and even to-day public opinion is still very effective against eviction. The spirit which animated all these laws was full of the principle that in any conflict between the rich and the poor, the latter was always to have the full benefit of the doubt.

A JAPANESE VIEW ON MATTERS ENGLISH.

Baron Shibusawa, the great Japanese financier, on a recent visit to London, according to an interview published, remarked:—

"I came to England by way of America. America seems to me like the young man of 25, full of impetuous vigour, in the first flush of his strength, who thinks nothing too great or too high for him to tackle. In

England, on the contrary, I find the middle-aged man, his activity, his readiness to rush into every concern, may not be so great, but possibly there is a maturity of judgment and a wisdom about the ripened life of the nation which the younger lacks. Yet one could not fail to be struck by the great economy in manufacture in the United States, the abundant use of labour-saving machinery, the production automatically on a large scale, and the wise utilisation of waste. In Japan, England still remains the foremost commercial nation. England was there first, and your merchants established themselves before others started to come in. Banking institutions are in British hands, and the nation that controls finance is greatly helped in its trade. And there is nothing but good feeling among the Japanese for England, as I trust there is in England for us. But the English commercial position is being attacked. American imports are steadily growing. For some time, while America bought most of our exports, we took very little from America. Now the goods from America are every year increasing."

COOKING BY VOLCANIC HEAT.

The Maoris of New Zealand cook their potatoes and other vegetables in volcanic heat. There are a few volcanoes in New Zealand, and some of the Maoris live up in the mountains near them. They make the volcanoes do several useful things for them, but the queerest is the cooking.—*Gipping.*

USE OF WHITE LEAD IN FRANCE.

The Minister of Commerce and Industry has submitted for signature by the President of the French Republic the following decree regulating the use of white lead for house painting, accompanied by a report stating that the text has been approved by the Consultative Committee of Arts and Manufactures and also by the Council of State, while the last-named body has for the present declined to sanction total interdiction of the deleterious substance in question:—

Art. 1. In painting shops, white lead must only be used in the state of paste.

Art. 2. The direct use by hand of products with white lead base is forbidden in house-painting works.

Art. 3. The dry scraping and rubbing with pumicestone of white lead paint are forbidden.

Art. 4. For wet scraping and rubbing with pumicestone, and generally for all work of white lead painting, the masters must provide overalls to be used exclusively for the work, and must enjoin their use on the men having these overalls frequently washed and kept in good condition. All that is necessary to ensure

cleanliness must be provided for the men at the spot where the work is carried on. The tools and appliances are to be kept in a good state of cleanliness, but without dry scraping.

Art. 5. The masters must have the text of the present decree posted up in the localities where men are taken on and paid.

Art. 6. The Minister of Commerce, Industry, Posts and Telegraphs is charged with the execution of the present decree, which will be inserted in the *Bulletin des Lois* and the *Journal Officiel* of the French Republic.

TRUSTS FROM THE POINT OF VIEW OF ECONOMICAL THEORY.

The principal object of the paper is to attempt to estimate the effect of a general Trust system on the chief economic categories, namely, production, prices, profits (including interest), and wages.

In it I have endeavoured to show, says Professor W. Graham, in a paper read before the British Association, which for the benefit of our readers is now condensed, (1) That production under a Trust system would be largely increased on account of certain economies and greater returns; and that whether it would be increased after a generation or in the end would depend mainly on two considerations—whether inventions and discoveries were duly encouraged, and whether the practice of "limiting supply" were resorted to or not.

(2) That as regards prices, while the Trusts would have the power of fixing them at discretion, and in some cases would be much tempted to raise them beyond what competition prices would have been, that nevertheless their sense of self-interest, if not of pecuniary interest, would be a check on the most important cases, and that while there would probably be a difference between competitively-determined and monopoly-determined prices, unfavourable to certain classes of consumers, it would be less than some enemies of Trusts apprehend, owing in part to the elements of monopoly at work at present in determining prices.

(3) That profits and the rate of profits as understood by Mill, and consequently dividends or profits minus wages of manager and insurance, would be raised, and

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raised more because manager's salary is a fixed amount; but that some of the owners of capital would not be benefited by the rise on account of the shares taken by promoters and under-writers; that, as closely connected with profits, though also obeying a law of its own, even under monopoly, interest would also be raised at first; but whether it would continue to be raised would depend on certain things which would probably not be the same under a competitive as a Trust system, namely, the state of industrial stability and the co-relative state of the speculative spirit, the state of invention, of foreign trade and of the extent of foreign investments to develop production in other countries.

(4) That the question of wages, so difficult even under the present system, half competitive, half of combination, would not be more difficult on the whole under a Trust system; and that self-interest would prevent a reduction of wages below former levels, from the increasingly clear perception of intelligent managers that good labour is worth high wages, and inferior labour often "dear at the price," though low; that accordingly wages might, *ceteris paribus*, be as high as under the existing order, though Trade Unions would occupy a less strong position than at present to enforce their desires by a strike, without being entirely helpless; that the employment of the working classes would probably be more steady, though their sense of independence might not be so strong.

These general theoretical conclusions are afterwards compared with the results of some of the more notable American experiments in Trusts, as gathered from American economists, with a view to test their soundness and applicability to real cases that may arise, especially in countries under a system of Protection, which give a much fuller scope to the evolution of Trusts. *Invention.*

A HISTORY OF HINDU CHEMISTRY

BY DR. P. C. ROY,

Professor of Chemistry, Presidency College, Calcutta.

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"It is a completely original production, the subject it treats of having never before been dealt with by any Oriental scholar. Dr. Roy has for years been engaged in his researches, and has thoroughly mastered the details about the scientific knowledge of the Indo-Aryans, to be found in the *Vedas*, the *Puranas*, the *Tantras* and such Sanskrit medical works as *Charak* and *Susruta*. The author is of opinion that during the middle ages the Hindus knew more of chemistry than the Europeans of that age. The book is illustrated with interesting drawings and altogether it promises to command the attention of Orientalists Scientists alike."—*The Pioneer*.

APPLY TO.—G A NATESAN & CO., ESPLANADE, MADRAS.

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It may be stated that a page of the Review takes in about 750 words.

All contributions, books for Review should be addressed to Mr. G. A. Natesan, Editor, The Indian Review, Esplanade, Madras.

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OURSELVES.

With this number the *Indian Review* completes its third year of existence. It is no small satisfaction to its conductors that within this comparatively short period it should have established itself well enough to obtain the steady support of the public. The roll of subscribers has been increasing, and the arrear-list, though inevitable, is yet tolerable.

Encouraged by the support hitherto received, we propose to add eight pages, so that from January next we shall give regularly not less than 64 pages of reading matter. In view of the importance which the problems of industrial and educational reform have of late been assuming, it is proposed to slightly rearrange the matter, so that more space may be devoted to these two topics. Endeavour will be made to gather together all the current ideas relating to these subjects and chronicle all the movements that seem likely to be really helpful. We need hardly say that the success of the Review is largely in the hands of our subscribers, and we hope that those who are in arrears will promptly pay up and that all will do their best to increase our circulation, so as to enable us to continually enhance the usefulness of our journal.

Madras Census Report for 1901.

WE are indebted to the courtesy of the Madras Government for the volumes of the Census Report that they have sent us. Despite the fact that the Report has been a great deal cut short, the multitudinous nature of its contents permits our giving only the main results arrived at. The principal merits of the Report are its brevity and the graphic representation of statistics in the 35 figures prefixed to it which are certainly, as Mr. Francis happily puts it, "a double-distillate of Census." In total area Madras Presidency proper is about 20,000 sq. miles larger than the United Kingdom, while in population it is slightly greater than the governing Kingdom. The largest and most populous district is Vizagapatam, the smallest is Madras City and the least populous is Nilgiris, which has less than a fourth of the number living in the Municipality of Madras. The population of the Presidency as a whole has increased by 2½ millions which stands in glaring contrast with the great falling off in the Western Presidency, Rajputana Agency and Central India. Christians have multiplied more than twice as rapidly as the people themselves and number now over a million, the Roman Catholics, of course,

predominating. The chapter on Age, Sex, and civil condition is as informing as it is interesting. It deals in detail with the question, hitherto not noticed by previous Census Reports, of the remarkable deficiency of females in the seven contiguous Districts of Kistna, Nellore, Cuddapah, Kurnool, Bellary, Anantapur and Chingleput. While for the Presidency as a whole there are 29 more females for every 1,000 males, in these seven Districts there are about 50 less females for every 1,000 males. A similar disproportion occurs among the Nambudris and Embrantiris of Malabar, among whom there are only 823 females to every 1,000 of the other sex. Mr. Francis rightly attributes the latter to the custom among the Nambudris (which the Embrantiris imitate) of allowing only the eldest son of each family to marry within his own caste, the others contracting alliances with Nayar women. But the former is more difficult of easy solution. After an interesting discussion Mr. Francis concludes thus: "There is thus considerable ground for supposing that the deficiency of females in the seven Districts to which we have been referring is to no small extent due to the deaths among young girls which are occasioned by forcing maternity upon them while they are still immature." Thus though early marriage seems to be in the ascendant in these seven Districts, it is somewhat consoling to see that it has died out appreciably in the eighteen others and that the proportion of the widows also has declined by nearly one-half. "Among the Brahmans as a body" remarks Mr. Francis, "the improvement has been very noticeable. Probably among this caste the efforts of the party which has of late years been working for reform in this and other social customs are gradually bearing fruit." Education also has made great progress among the girls. The Census infirmities of insanity, blindness, deafmutism and leprosy also show some decline. The language of the Presidency as might be expected, is mainly Dravidian, over 92½ p. c. speaking one or other of its dialects. A chapter is devoted to the study of the effect of the caste system on the Hindus of to-day, its present condition, and the changes which are taking place in it. The caste glossary appended to this chapter is an important contribution towards the work of the ethnographic survey of India now in progress under the direction of Mr. H. H. Risley. The last chapter shows that 69 p. c. of the total population live by agriculture and 3½ p. c. by cotton weaving. In conclusion we congratulate Mr. Francis on his short and able Report and heartily commend it to all who are interested in the progress of this presidency.

The Gaekwar on Indian Industries.

We print elsewhere the full text of the admirable address delivered by His Highness the Gaekwar of Baroda on the occasion of the opening of the Industrial Exhibiton at Ahmedabad. It deserves to be read by all who have at heart the prevention of the serious economic evils which are at present threatening the country. For other reasons also we welcome the pronouncement of His Highness on this very important question of the day. Those who in common with us have shared the feeling of humiliation at the sight of the native Princes being lectured to and admonished by Viceroy for failure to discharge efficiently the duties pertaining to them as responsible rulers of States should have ample reason to congratulate themselves on the existence among us of a ruler of the type of His Highness. The Gaekwar has received the unbounded admiration of his countrymen for his genuine patriotism and liberal culture in the possession of which he has few or no equals amongst his class, and the present noteworthy address has but served to enhance, if that were possible, His Highness's reputation as the premier Indian prince of modern times.

The chief merit of His Highness's address at Ahmedabad is its boldness and impartiality. If he blames the people for their apathy, for their mutual suspicion, their want of business-like habits, and scolds them in no undisguised language for failures in the past, he does so in no spirit of superciliousness and fault-finding, but with the spirit of a great patriot to stir them up again to realise the historic greatness of their country. He is also more than any others in the country alive to the fact that, under the present circumstances, no industrial development of a serious nature can be expected to take place without the active assistance and sympathetic co-operation of the Government.

The Gaekwar protests against the theory that there is anything like an inherent inferiority in the tropical races in the modern struggle for existence. "To suppose that any nation can be shut out from the operation of the Law of Evolution is utterly unscientific and absurd in the light of history." Believing firmly in the truth of the law of progress and encouraged by the great work which the master minds of this ancient land have in the past achieved in the domain of religion, philosophy, arts and morals and also in the battle-field, the Gaekwar believes that the depression and apathy of the past will in no way stand as a permanent bar to the industrial regeneration of

the country. In accounting for the causes of our present industrial depression, while making due allowances for the philosophical national temperament of the people which does not adequately realize the practical demands of modern life and the other defects in the national character which have unfortunately stood in the way of active industrial enterprise, the Gaekwar goes into the matter a little deeper and adduces a further reason, namely, the disastrous effect which the acquisition of political power by the East India Company and the absorption of India into a growing British Empire, has had on the industries of the country.

Nobody can quarrel with the tone and the spirit of this masterly address, which is at once bold, comprehensive and impartial. There is one point to which, however, we should like to draw attention. It has been suggested by some critics that the Gaekwar's address is pessimistic in tone. We venture to observe there could be no more erroneous view of the Gaekwar's position. Can the following be the utterance of a pessimist?

We despair too easily. Let us remember that we must expect failures at first; but that it is those who learn from failure that succeed. Moreover as any one may learn from a survey of the present state of Industry, there is evidence that some do succeed. We have not, of course, made the most of our opportunities, but it is worth while remembering that something has been done because it shows us what it is possible to do, and encourages us to do it.

And again :

If therefore, I have dwelt upon our old manufactures and commerce and the way in which they were crushed, it is not with the unprofitable object of airing an old grievance, but in order to point out that there is no reason for this discouraging view of ourselves.

Surely this is by no means pessimism, but sober optimism which does not fail to note the difficulties which beset the path of this much needed reform. The Gaekwar is addressing his own countrymen. Actuated by a feeling of genuine patriotism for the land of his birth, proud of the historic greatness which lies at its back, mourning for the deplorable situation of the present, burning with noble ambition to achieve greatness in the future, he no doubt paints vividly the faults of his countrymen and lays great stress on them; but such criticism is that of a sincere friend whose sole desire is to whip up his apathetic brethren to activity.

—♦—♦—♦—

An Index for Vol. III of the Indian Review is in type and will be sent with the January number.

THE POOR MAN'S BURDEN IN INDIA.

WHEN the Editor was good enough to ask me to contribute to his excellent magazine, it so happened that the debate on the Indian Budget had just been published, and Sir Henry Fowler's renewed attack on the Salt Tax encourages me to hope that the psychological moment may have arrived for another assault on that monumental iniquity. Unfortunately, as Lord George Hamilton apologetically pointed out, the tax does not seem to be viewed by the educated and influential natives with the same feelings of abhorrence which actuate—may I say really intelligent people who can appreciate injustice even if it does not affect themselves? The first thing to be done, therefore, is to convert, (if they still need conversion) the educated readers of a journal like the "Indian Review" who may not have had much personal experience of the oppressive nature of the Salt Monopoly as it is administered in India amongst the dumb masses.

Not that the higher orders do not suffer also; but the evil effects in their case are somewhat obscure and mostly escape their notice altogether. They can always get enough salt for their daily wants and it does not occur to them how many industries are strangled, how agriculture itself is injured to an unknown extent and how cattle and men suffer in health for want of an *un stinted supply* of salt. There are people, of course, now-a-days who say salt is a poison—as no doubt it is if taken in sufficient quantity—but the great majority still believe, and are justified in believing, that it is an absolute necessary of life, especially amongst a people so largely vegetarian as the natives of India.

But it may be argued that even though it is a necessary of life there is no reason why the Government should not make it a monopoly, or, in other words, treat it as national property. Many people, (as pointed out by Mr. Campbell,) think that

coal gas and water should be national property administered by the Government for the benefit of all; and, as one who has distinct leanings towards Land Nationalisation in some form or other, I cannot refuse to admit that the salt mines of a country, and perhaps the salt manufactured from sea water, may very properly belong to the nation; but only on the understanding that the salt is sold at as cheap a rate as possible, and that there is the least possible interference with old women who evaporate a little earth-salt *for home consumption and not for sale*. The land of India is, in one sense, a Government monopoly, because no one can cultivate an acre of it without having paid the Government for the privilege; but the Government does not attempt to cultivate the land by means of an army of official harpies: it makes it over to the people to cultivate as they please at a "rental" more or less settled on certain tolerably well-known principles.

It is so long since I was actively engaged in the work of sending poor old women to jail, (where they were better housed and fed and more comfortable than they had ever been in their lives before,) for so-called "offences" against the Salt Law that it is difficult for me to say anything very "up-to-date" on the subject, so that I am the more inclined to welcome the advent of an ally like Sir Charles Dilke, whose striking speech affords ample material for more quotation. Let us hope he may not forget the subject when, (if ever) the liberal party again come into power. He said, and I hope all the liberal and progressive young Indians will note it carefully, that "in years of "what are called prosperity by the Secretary of "State, we have been unable to diminish, still less "abolish a tax which has all along been, by the "admission of the House of Commons, probably "one of the worst ever levied in the civilized world, "a tax distinctly admitted by the Government of "India for the last thirty years as one which sub- "tracted from the health of India in a most "marked way. The slackness of the consumption

"of salt," (he went on) "through the heaviness of the tax tends directly to the ill-health of the people in a way not known to the people of other countries. The right Hon. gentleman, the member for Wolverhampton, (Sir Henry Fowler) spoke of the salt tax as having been reduced. It was reduced at the time of which he spoke, but, however greatly it was reduced in one province, it was increased in a greater degree in every other part of the Empire; and that tax which has again increased in 1888 has not yet been repealed or even diminished to the former level." I reproduce these words of Sir Charles Dilke because they are, so far as I remember, the first evidence we have had that any statesman of the first rank has gone so far as to contemplate the repeal of this most obnoxious Tax, and it is repeal alone that will really cure the evils wrought by the monopoly. I have also drawn special attention to Sir Charles's description of the Salt Tax as being in the deliberate judgment of the House of Commons "one of the worst ever levied in the civilised world" because I should not myself have ventured to say anything worse of it, and I was not aware that the British House of Commons had committed itself to that very decided opinion. Holding such an opinion, how strange it seems that the same House should allow it to go on and even increase in virulence.

No one expects any tax to be faultless, much less acceptable to the taxpayer; but there is something to be said for most taxes, whereas scarcely any one, except the late Sir Rivers Thompson, Lieutenant Governor of Bengal, has ever had a good word to say for the Salt Tax. Sir Rivers, indeed, went so far as to say that he did not believe anyone had ever questioned that salt was a proper and legitimate subject for taxation; and this he said not many years after the abolition of the tax had been discussed at considerable length by many correspondents in "the Times" (August 1875). His arguments were, however, 'demolished', (as observed by the "Madras Mail" at the time,) by

Major Baring (now Lord Cromer) and the Viceroy who "was evidently aware of the intimate connection between cheap salt and scientific agriculture", and there is now scarcely any difference of opinion amongst intelligent people as to the desirability of getting rid of it or at least reducing it enormously as soon as India can shew a *real* surplus. But this can only be done by raising the five millions otherwise; and, as far as one can see, the only plan is for the sixty millions of people who are admitted, (even by Mr. Digby,) to be *really* prosperous to pay it. It is only 15 rupees a year amongst twelve of them and might easily be assessed on the payers of Income Tax *plus the Zemindars* (who are exempt from the incidence of the regular Income Tax) under the name (in Madras) of "Uppuvari," or some such distinguishing title. It seems hopeless to expect to get rid of it on any other terms, and there can be little doubt that it would be well worth the while of the prosperous classes to compound for unlimited salt by guaranteeing the Government their five millions sterling. Their agricultural and other industries would prosper so amazingly with an unstinted supply of salt that they would probably benefit by the change even pecuniarily, because it must be remembered that the well-to-do classes are in all probability already responsible for the consumption of nearly half the salt that is eaten: it is only the poor who are mercilessly stinted in their supply and who suffer accordingly from all sorts of diseases. As I said once in the "Madras Mail" what "would the mercantile classes say to an income tax of 4 per cent on their *gross* income? And yet that (according to Mr.—now Sir—James Caird) "is the precise equivalent of the tax they consider so admirably suited to the half-starved millions of India of whom it has been said by a very high authority that they scarcely ever have really enough to eat and are always on the verge of "starvation." Five millions sterling divided amongst Mr. Digby's prosperous sixty millions would be little more than one rupee apiece or the equivalent of, say, 40 lbs. of salt at the present rate—not much more than double the allowance that is generally considered sufficient for health, and probably not more than many of them actually consume, (or waste,) at present.

J. B. PENNINGTON.

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DELHI: THE ROYAL CITY OF INDIA.

DELHI is the royal city of India *par excellence* and by antiquity, for her may be made the unique claim of being the oldest Imperial City in existence. Where are her contemporary capitals, Memphis, and Thebes with her hundred gates? Level with the dust of the desert, or known only by those gigantic wrecks of

'Temples, Palaces, and Piles stupendous,
Whose very ruins are tremendous'.

Where is proud Nineveh, and Babylon, with her hanging gardens and towers? They are "the dwelling palace of Dragons, without an inhabitant." And classic Greece, and Imperial Rome, and tragic Jerusalem, these, though living cities, still were but in the swaddling hands of infancy when the capital of India was already hoar with age, when her poet-priests chanted the Veda and "praised Him, whom the starry heavens declare.* The difficulty is to realize the marvellous antiquity of Delhi when we still see her in vigorous vitality and beauty. She seems to embody that subtle, indescribable, charm of India which all Europeans acknowledge, but none can define. Wherein does the charm lie? Partly perhaps in the juxtaposition of past and present. In the glamour of an old-world flavour side by side with to-day. In the 'ekkas' jolting along by the steam-engine; in the coolie in his loin-cloth carrying a telegram; in the dainty dishes "fit for a King," yet cooked by a bundle of sticks on a couple of bricks. It is the surprise, the novelty, the mingling of the primitive and the present, wherein lies much of the indefinable charm of Indian life. This element is totally absent from the pushing capitals of Europe, and gives to us Europeans a delightful sense of freshness and interest in India. And of

this element Delhi is the incarnation. The most aristocratic, ancient, and patrician city in the world, she is yet throbbing with the current life of to-day. Other ancient capitals there are as Edinburgh, Athens, Rome, but they are, as said above but children compared with the capital of Pandu. Let us briefly glance around her.

Delhi was founded by Yudisthira son of Pandu, about the 15th century B. C., its early name being Indra Prestha or Indrapat—the *Indabara* of Ptolemy. It stood on the banks of the Jumna, and the ruins of the ancient city are still strewn between modern Delhi and the Kutub Minar. There still stands on the old site the Fort of Indrapat, or Purana Killa, whose walls are about a mile in circuit and have the appearance of great antiquity. Within it is the Killa Kona Mosque, one of the most satisfactory buildings of its class in India, says Fergusson, the critic of architecture. Every detail was fitted to its place and purpose. 'We forget the Hindu except in its delicacy, and we recognize one of the completed architectural styles of the world.' It is one of the most exquisite mosques near Delhi. It is said to have been begun by Humaun, the Mogul Emperor, and completed by his deposer, the Afghan Sher Shah, 1540.

Two more of Delhi's ancient treasures are the Pillars of Asoka, taken there by the good Emperor Feroz Shah, who placed one in his hunting Palace, in the north west end of Delhi, where Hindu Rao's house now stands, and the other he placed in his City Palace, and it still stands in the Kotila, once the citadel of the Palace-Fort. It is inscribed with the famous edicts, against the taking of life; vain festivities; ordering religious toleration: the duty of munificence, and so on and dated B. C. 298. We must note the singular liberal-mindedness of the Sultan Feroz Shah, who though himself a Moslem could thus honour these Buddhist remains, emulative of the broad-souled Buddha himself. For rarely indeed

*Compare remarkable resemblance with Hebrew Psalm XIX. 1. The 'heavens' declare the glory of God! *Ad seq.* Also Ps. VIII. 3.

do we find a Moslem Sovereign of Delhi other than a bigot—there are, so far as I remember, but three Emperors in all her Moslem dynasties who were not intolerant of Hindus, viz., Feroz Shah, Baber and Akbar—and curiously enough, they are in other respects also the finest sovereigns who ever ruled in India.

As we are looking at antiquities let us take the next in order of age, the Iron Pillar at old Delhi, one of the most curious antiquities in India. It stands near Kutub's Mosque near the celebrated Kutab Minar, one of the seven wonders of the world. Its age is not yet finally settled, or its object. It is a solid shaft of wrought iron, 422 feet high, and the question is, how are there no signs of rust? Can iron merchants of the present day explain? The Kutab Minar itself stands in the old Hindu City of Prithivi Raj, the last Hindu Emperor of Delhi, and is named after the first Moslem occupier of the throne, Kutab. But Kutab seems to have simply adapted a previously existing tower for a minar—the building is admittedly Hindu, and the local tradition is that it was built by Prithivi Raj as a tower whence his daughter might view the sacred Jumna. Others hold that it was built as a Tower of Victory by the Moslems on the conquest of Delhi.

Much is here amidst the ruins of the Hindu capital of a thousand years ago had we time and space to loiter, but we must return to the newer city. And as we go we cannot fail to be impressed by the scene of immense desolation around us. For 45 square miles around, the ground is strewn with the ruins of dead cities. For the present Delhi has been the seventh city of the name.

As we near the town within a few miles, we are struck with the beautiful building known as Humaun's tomb. Its plan was later adopted for the Taj at Agra, amplified and decorated, but many prefer the chaste purity of this noble mausoleum to the more elaborate Taj. Humaun and his beloved Begum Hamida sleep within it. An

episode of more recent days connected with it may be mentioned. At the last storming of Delhi 1857, when the Fort and Palace fell, the old rebel King Bahadur Shah and his family fled for refuge to the dark vaults of Humaun's tomb. Here they were hunted up next day, by Hodson, Commander of a small body of splendid Sikh 'Guides.' After some hours' conference with the old King he at last surrendered, and was granted his worthless old life and that of his intriguing wife and her son. He was conducted back to the Palace at Delhi, and once more entered the great hall of audience of his fathers, was received in state by the British Representative, and conveyed to prison. A few months later, as every body knows, he was exiled to Rangoon and died there in 1862. But his sons, the two Princes of Delhi, were yet to be dealt with, and for them Hodson returned to Humaun's tomb where they were in hiding. The large gardens surrounding it were filled with a threatening crowd of followers, the scum of the city and palace. Hodson had but 100 of his troops with him, while the crowd numbered 7,000, but with dauntless daring he ordered the crowd to disarm, while he and his little band sat unmoved in their saddles, and to emphasize his coolness he puffed a cigar. Only a British born could achieve such sublime audacity! One man to 700,—it was the very exaltation of 'cheek', yet his very daring seemed to stagger the crowd, they quietly surrendered their arms, which were piled in wagons and sent to the city—but the two Princes were shot by Hodson's pistol. It is possible the rabble when they recovered from their astonishment would have attempted a rescue, even though disarmed; or it is possible Hodson thirsted to avenge the murder of his countrymen and innocent ladies in the Palace done by the consent of these Princes on the 10th and 11th of that memorable May in which the mutiny broke out at Delhi. There was hot blood at the time and just indignation, and these Princes if tried by Court-

Martial would in any case be condemned to death. Their bodies were exposed in Chanderi Chowle, the main street of Delhi, for some days, as a terror to evil doers, and the back of the mutiny was broken. And there is no doubt but that any one who had anything to lose rejoiced at the return of British rule. It is the lawless and the landless who are generally the leaders in treacherous rebellions. And it is well known that the Native Chiefs of most power and influence were the most loyal. I believe every Indian gentleman living wishes us knowing that British Power is the most equitable and just ever known in India. We have neither racial nor religious animosity—in fact I believe that in race we are brothers in blood. Nowhere is the difference between British and Eastern conquest more apparent than in the treatment of the capital city of Delhi. Even in successive Hindu conquests though we do not know all of their doings we know that the victor demolished city after city, and built another on its ruins. When the Moslems succeeded the Hindus they likewise destroyed the beautiful city of Prithivi Raj, and used the materials of his exquisite Palace to build the Kutab Mosque, whose forest of beautifully-carved Pillars witnesses to its former glory. (1194). Similarly when Patan and Turki succeeded each other their dynasties usually began by building a city for themselves after wrecking the conquered one. But still worse was it in the 17th century when Delhi was three times sacked. First by Nadir Shah, who stole the famous Peacock Throne and looted Delhi to the extent of 70 to 80 millions sterling in gold and jewels. Then by the Afghan, Ahmed Shah Durrani. Then by the Marhattas who tore down the solid silver ceiling of the Palace and carried off whatever was worth-taking. But when the British came they took nothing; but Power only—they re-instated the old King held in captivity by the powerful Marhattas, and set themselves to establishing law and order. The grand old Palace of the Moguls they

have left as they found it, sadly marked indeed by the traces of the tragedies it has passed through, but not wantonly destroyed. The *Diwan-i-Khas*, or Hall of Audience, with its beautiful marble colonnades is perhaps the finest Hall in the world. This magnificent Palace is three thousand feet long and eighteen hundred feet broad—and in its great court there is space for ten thousand horsemen! A fitting home for the Grand Moguls. It is now looked after by the British Raj, in the form of his representative in scarlet tunic and glittering bayonet, that sweet innocent, the British soldier.

The Mosques of Delhi and of some of her Jain temples are also extremely beautiful, the gleam of their marble domes and lofty minarets looking like those of a city in fairyland against the clear blue sky. There is indeed a general aspect of queenliness, of majesty, and massive strength combined with elegance about Delhi, which make her in appearance as in fact an Imperial City. This, with the aroma of the old world about her; the fragrance of the Vedic Age; the lustre of Vikramaditya's reign, studded with its Nine Gems of learning; the halo of Siladitya's piety; the sheen of Rajput chivalry; the sound of Mogul pageantry and pomp—all this as it streams down the echoing halls of the centuries blent with the practical bustle of to-day, make Delhi the very embodiment, as we said before, of the indefinable charm of India.

At the present moment she is dressed for the transformation scene, and is a colony of camps. All the Powers and the Potentates of Hindustan are on her stage, and the scene is like a canvas-covered sea; as if Madras harbour were appareled for an Imperial Regatta. Not thousands, but millions throng around her, gathered there to place upon the brow of the British King, the heir of all her dynasties, the historic Crown of Pandu and of Baber.

— Long live the King!

FREDERIC BARR.

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THE INDIAN LAND QUESTION.—II.

(Continued from page 604 of the October number.)

NORTHERN INDIA.

Allahabad and some neighbouring districts were ceded by the Nawab of Oudh to the British in 1801, and Agra and other districts were conquered from the Maharrattas in 1803. The British Government pledged themselves by Act and Proclamation to conclude a Permanent Settlement of the land revenues in these ceded and conquered districts.* Lord Minto insisted on the measure, as a violation of the pledge would be inconsistent, he said, "with the maintenance of the faith of Government so publicly and so solemnly pledged to the landlords." † And his successor, the Marquis of Hastings, once more urged "a Permanent Settlement of the land revenue, either upon the principle of a fixed Jumma, or of an assessment determinable by a fixed and invariable rate." ‡ The Court of Directors however violated the pledge, and declined to surrender their prospective profits by concluding a Permanent Settlement.

Regulation VII of 1822 was then passed, and the State claimed 83 per cent. of the rental of the landlords. In a few years it was found that the claim was harsh and impracticable.

To Lord William Bentinck is due the credit of introducing long terms of settlements in Northern India, and somewhat moderating the State-demand. The settlement of Northern India commenced by Robert Merttins Bird in 1833 was concluded in 1849, and for the first time gave the agricultural population some relief from frequent harassment and excessive demands. The State-demand was reduced to 66 per cent. of the rental. The settlement was made for 30 years. Where Village Communities existed, they were to pay the revenue through their headmen; in other

places the settlement was made with landlords. And it is to the credit of Robert Bird that in spite of the decision of the Court of Directors he deliberately recorded his opinion, not once but a dozen times over, that where the Districts were fully cultivated and duly assessed, the settlement of the land revenue which he made should (except in so far as it might be affected by future canal irrigation) be considered permanent and perpetual.* It is needless to add that this recommendation from the Father of Land Settlements in Northern India was quietly disregarded by the Court of Directors!

A further improvement was made under the administration of Lord Dalhousie. The State-demand of 66 per cent. of the rental was found to be harsh and excessive, and it was reduced to 50 per cent. of the rental by the famous "Saharanpur Rules" passed in 1855. Rule XXXVI declared that "the Government have determined * * to limit the demand of the State to 50 per cent. of the average net assets."

Then came the administration of the illustrious Lord Canning. And after the East India Company with its Court of Directors had been abolished in 1858, Lord Canning, the first Viceroy of India under the Crown, dared to recommend once more a Permanent Settlement of the land revenue for all India. Lord Lawrence, when he became Viceroy, supported this recommendation. Sir Charles Wood, the first Secretary of State for India, considered it a sound measure, "calculated to accelerate the development of the resources of India, and to ensure in the highest degree the welfare and contentment of all classes of Her Majesty's subjects." † Sir Stafford Northcote, a later Secretary of State for India, also supported the proposal "in consideration of the great importance of connecting the interests of the proprietors of the land with the stability of the British Government." ‡ For a time, India seemed to be on the eve of obtaining that boon

* Regulation XXV of 1803 and IX of 1805.

† Minute, dated 11th July 1812.

‡ Revenue Letter, dated 16th September 1820.

* Report dated 21st January 1842. Paragraphs 25, 39, 72, 92, 134, 136, 138, 178, &c.

† Despatch of 9th July 1862.

‡ Despatch of 23rd March 1867.

which was calculated to foster agricultural prosperity, stimulate agricultural industry, and save the people against the worst effects of recurring famines. But time passed on; the benevolent spirit which inspired Indian administrators, both in England and in India, during the first 20 years of the direct administration of the Crown, disappeared as modern Imperialism gradually took its place; the desire to promote "the welfare and contentment of all classes" and to connect "the interests of the proprietors with the stability of the British Government" lost its force as the Empire became stable; and the proposal of a Permanent Settlement for all India, made by Lord Canning in 1862, was finally rejected by the India Office in 1883.

The "Saharanpur Rules" remained. The State-demand was limited to one-half of the rental. But this rule too was applied in a way which, to say the least, was not creditable to the Government. The Government demanded, from landlords not one-half of their actual rental, but one-half of the prospective and potential rental of their estates, which might be anything! The Memorialists of 1900 urged that the rule should be honestly worked, and the Government demand should be one-half of the actual rental. On this point, Lord Curzon's decision is clear, simple and satisfactory. "The assessments," says Lord Curzon, "have ceased to be made upon prospective assets."*

One evil remains. It is useless limiting the Government demand to one-half of the rental, if the Government takes power to impose local cesses on the rental value to an indefinite extent in addition to the land revenue. These local cesses which

were almost nominal when the Saharanpur Rules were passed have risen to about 12 per cent. on the Land Revenue (or 6 per cent. on the Rental) within the last half a century. Therefore, while the landlord assures himself that the British Government will leave him one-half of the rental under the Saharanpur Rules, he deceives himself; and the word of promise which is addressed to his ear is broken to his hope! Is it not possible to free the land (virtually the only source of the nation's subsistence) from these increasing and irritating assessments? Is it not possible in the words of Lord Salisbury so to change the Indian fiscal system that "the cultivator should pay a smaller proportion of the whole national charge?" He will be a wise and a great administrator who will give to the agricultural people of India the assurance of some clear, definite, intelligible limit of the Government demand on the produce of the soil,—a limit which the peasant as well as the landlord will easily comprehend, and which the Settlement Officer and the Revenue Collector will strictly adhere to.

THE PUNJAB.

The Punjab was annexed in 1849, and the mistake of over-assessment was committed in this as in other Provinces. The State-demand was fixed, at first, at one-third the produce of the soil. This demand was found to be excessive and unworkable, and was reduced to one-fourth, and then to one-sixth of the produce. Lahore and Amritsar Divisions were settled between 1860 and 1870 on this principle, and in later settlements *one-half of the customary rents* was accepted as the Government demand. "A full fair rent, paid by a tenant-at-will" is accepted as the net produce of his field,* and the Government demand is fixed at one-half of this rent. This is a safer ground of calculation than the theoretical calculation, based on an examination of the soil, followed in Madras and in Bombay. And much hardship and over-assessment in Bombay and Madras would have been avoided

* Land Revenue Resolution dated 16th January 1902, Paragraph 33. And Sir Anthony Macdonell said before the Currency Committee that the Government does not now, for the purpose of assessing revenue, make any calculations as to the theoretical or possible rents of fields, but takes about one-half of the actual rental which the landlord secures from his tenants. [Minutes of Evidence, Vol. I. P. 211]. Nevertheless landlords in Northern India complain that the professed rule of accepting one-half the actual rental is not always carried out by Settlement Officers in practice; and they cite instances in which such officers assess estates on "theoretical or possible rents" which landlords cannot and are not allowed to levy from cultivators.

* Assessment Instructions of 1893, Rule VI.

if this simple rule of demanding *half the customary rents* had been adopted in those Provinces.*

A Land Revenue Act was passed for the Punjab in 1871, and an improved Act was subsequently passed in 1887. About one-half of the landlords in the Punjab are petty landholders who cultivate their own fields, while the rest of the country is owned by large landlords whose estates are cultivated by tenants. The wise rule of long settlements for thirty years, which has been followed in Northern India, Bombay, and Madras, for half a century and more, has been unwisely modified by Lord George Hamilton in the case of the Punjab and the Central Provinces of India. He ruled in 1895 that the term of settlements for the last named Provinces should be 20 years only. The modification is ungenerous and unjustified by the reasons which have been urged; and there is some ground for hope that the old 30 years' rule will once more be accepted for all the settled provinces of India. In reply to the Memorial of 1900, already referred to, Lord Curzon writes: "whether these considerations, justifying a shorter term of settlement than 30 years, apply with sufficient force to the Punjab and the Central Provinces at the present time; and if they do apply at the present time, whether the force of their application will diminish with the passage of time, are weighty questions to which careful attention will be given by the Government of India upon a suitable occasion."[†]

*This was suggested by Sir Louis Mallet as long ago as 1875. "If rent,—economic rent pure and simple,—is alone to be taxed, why instead of costly, cumbrous, capricious, and when all is said, most ineffectual settlement system, we cannot leave the assessments to take care of themselves, and take whatever percentage on the rental of the land we want, wherever we find it. I can only suppose that the answer would be that in truth the fifty per cent. of the net produce has been a mere paper instruction, a fiction which has had very little to do with the actual facts of the administration, and in practice the rates levied have often absorbed the whole rental, and not infrequently, I suspect encroached on profits also." Minute on Indian Land Revenue, dated 3rd February 1875.

[†] Lord Curzon's Land Revenue Resolution, dated 16th January 1902, Paragraph 18.

CENTRAL PROVINCES.

The first comprehensive Settlement of the Central Provinces was made from 1863 to 1867. The Malguzars of the Province were recognized as the proprietors of the soil, and the Settlement was made with them ostensibly on the principle of the Saharanpur Rules under which the Government demanded half the rental of estates as the land revenue.

The rental, however, which was taken as the basis of assessment, was not the actual rental. It was fixed by some process which is obscured by contradictory official accounts; * but the result was that the Government virtually "evaded" the Saharanpur Rules, and demanded a revenue larger than one-half of the actual rental of the estates. As the settlement was made however, for thirty years, the hardship caused at first was gradually removed, as cultivation and rents increased.

When the time approached for the next general Settlement of 1893, Mr. Mackenzie then Chief Commissioner, felt unwilling to bind himself by the

* I stated on a previous occasion that in this Settlement one-third of the gross produce of the soil was fixed as the rent payable by cultivators to landlords. The Hon'ble Mr. Fraser holds that this statement is a mistake, and that the rents were fixed by landlords and tenants, not by Government Officers (Paras 4 to 7 of Mr. Fraser's Note, which forms an enclosure to Lord Curzon's Land Resolution of 16th January 1902) I can only say in reply that the statement I made is based on official records, extracts of which are in my possession. (See for instance Mr. Russell's Jubbulpur Settlement Report, published 1867, page 53.) In any case Mr. Fraser's statement that rents were fixed "by landlords and tenants, sometimes assisted by a subordinate Government Officer" is distinctly contradicted by Mr. Alexander Mackenzie's Report No. 501 S dated 18th May 1887 in which it is stated that the "rental value of each Mahal was in fact determined by the comparison of a number of statistical inferences, the principal of which was that obtained by the application of soil rates to the areas under different soils in a village which yielded the soil-rate rental. Whether this rental corresponded in any way with the real rental of the Mahal depended on the extent to which rents rose in the proceedings taken for rent adjustment after the assessment was given out." Mr. Mackenzie was the Chief Commissioner of the Central Provinces in 1887 when he wrote this; Mr. Fraser was the Chief Commissioner in 1901 when he wrote his note. Who is correct? There are reasons for believing that Mr. Mackenzie correctly described the process adopted in 1863—67, and Mr. Fraser is wrong when he states that rents were fixed "by landlords and tenants sometimes assisted by a subordinate Government officer."

half-rental Rule; and found it difficult to evade it in the manner in which it had been evaded in 1863. In his letter No. 531 S, dated 18th May 1887, which was signed by his Secretary Mr. Fuller, now Chief Commissioner of Assam, he said:—

"It must moreover be realized that the system of settlement to which the Government has now by law committed itself will render it impossible to evade the operation of the *Half-assets Rule* in the manner followed at the last settlement. * * It would be safer to abrogate the *Half-assets Rule* altogether than to attempt to evade it by the calculation of *hypothetical assets*."

The Government of Lord Dufferin weakly consented to abrogate the healthy rule, and to fix the Government demand between 50 and 65 per cent. of the rental. It is to the honour of Sir Antony Macdonnell, successor of Sir Alexander Mackenzie in the Central Provinces, that he reduced the maximum to 60 per cent. and did much to mitigate the harshness of the new Settlement which had already commenced.

Then came the ungenerous order of Lord George Hamilton in 1895, that the period of Settlement should be reduced from 30 to 20 years. Under the illiberal spirit of modern administration, the old healthy rules were one by one tampered with; the limit of half the rental was increased to 65 or 60 per cent. of the rental; and the period of 30 years was reduced to 20 years. These are some indications of the spirit of modern Imperialism!

The famines of 1897 and of 1900 in the Central Provinces then came as a terrible lesson. The population decreased; lands went out of cultivation; the revenue fixed by the Settlement of 1893 could not be paid. Everywhere revision of the assessment was then commenced ending generally in a reduction of the revenue demand.

If we cannot improve on the rules of our predecessors, let us at least be faithful to those they laid down in the earlier days of British rule in India. Let us abide by the 30 years' rule introduced by Lord William Bentinck. Let us abide by the half-rental rule adopted by Lord Dalhousie. Let

us extend to the cultivators of India the security which was given to the cultivators of Bengal by Lord Canning. Let us explain to the Peasant-Proprietors of Madras and Bombay those "*definite conditions*" on which we seek enhancement of revenue, as was done by Lord Ripon. And lastly, let us not heap local cesses on the produce of the land, thereby silently evading the limits which have been placed on the State-demand from the soil. There is a cry from one end of India to the other that there should be some *definiteness*, some *certainly*, some *limits* to the Government demand, which the Revenue Officer will recognize, and the humblest cultivators can understand and reckon upon. Let it not be said to-day, as was said 45 years ago, that "the Government stands over them with a screw which is perpetually turned," as far as the screw will turn.

ROMESH C. DUTT.

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SOME SIDE LIGHTS ON IRRIGATION.

IT is coming to be generally recognised that Sir Arthur Cotton was in the main right in contending for irrigation and irrigation and more irrigation. At least it is beginning to be admitted that a Government which refuses to commence an irrigation project unless 4 per cent. clear profit can be expected is not doing its duty towards the tax-payer. For famine irrigation is of course the only true remedy. Railways and the like are only palliatives. Famine means drought, and water is the only cure for drought. But even were this not so, irrigation pays so enormously in the prosperity of the people, in the improvement of the country, of cattle, of trees, of wells, that it is the bounden duty of Governments to spend the tax-payers' money on this object, even if the direct returns by water-rate and enhancement of land revenue do not

repay the interest on capital expended. This has been obvious to many for a long time, but strangely enough not to the many of Revenue Officers of India, who should naturally have been the first to perceive it. Irrigation Engineers have always upheld it and have been accused of thinking that there is "nothing like leather." The words "Kurnool Canal" have always been considered by obstructives as a perfectly good answer to the apostles of irrigation.

A great change in general opinion is now taking place, but before this gospel can be properly resuscitated a few obstructions must be removed. One is the above mentioned use of the Kurnool Canal as a counter argument.* This canal was constructed by an English Company on a guarantee much against the wishes of the Madras Government, the reasons which induced the Secretary of State to insist on this course being neither clear nor creditable. The result of it, however, was that the construction was extravagantly carried out, many mistakes were made, and a good deal of malversation occurred. Had it not been so, the returns might have shown a much better proportion to the capital expenditure. This, however, has nothing to do with the main question. The extension of irrigation under this canal has been slow. If the rainfall is good the amount of water utilised is small. Even in famine years the area irrigated has never reached 100,000 acres. What is the reason of this? Some say that the soil—black cotton—is unsuitable for irrigation. This is on the face of it ridiculous. Black cotton soil is irrigated successfully, even eagerly, in innumerable places wherever water is available. Black cotton soil is irrigated in many small patches in the adjoining district of Bellary. Even under the Kurnool Canal itself thousands of acres of it are annually irrigated. This cannot be the reason. Others say that the people prefer dry cultivation, that it is easier and less expensive, that it brings them in all they want. This is true, as far as it goes, but it is not the whole truth. Those who

do irrigate under this canal know that irrigation even of dry crops pays much better than dry cultivation. Why then do they not irrigate? It is human nature to grow richer, if the means are at hand. The truth is that the population is insufficient. There are not enough ryots, there is not enough labour, there is not enough manure, there is not enough capital. Colonisation is what is wanted, and advances by Government. So far the only attempt to deal with a matter of this importance has been to appoint a special Deputy Collector,—a remedy apt to provoke a smile. The point is however that the Kurnool Canal is a success as far as the people near it are concerned. Even as it is, it protects a large area from famine and in the opinion of many repays already its cost in that manner. Therefore the sooner the impression that this canal is a failure is removed, the better. It need not be a failure.

Another obstacle to the construction of new irrigation works is, strange as it may appear, the manner in which the accounts are kept. These works, if of any magnitude, are generally financed by loan funds and interest is charged against them at 4 % . The works take time to develop, and during this time the interest unpaid is added to the capital cost. Consequently, by the time a work is fully developed it must return a good deal more than 4 % on the actual cost in order to cover the interest and the interest on interest. From the gross returns, *viz.*, water-rate and enhancement of land revenue, are deducted cost of collection and such of the returns as proceed from land previously irrigated by old works in the area affected. A credit is given for the maintenance of these old supplanted works. There would be no objection to all this procedure if it were merely a matter of account and were not considered as the true commercial aspect of the situation. But the Indian Government does so consider it and is extremely chary of sanctioning any work in which the net returns thus calculated do not show an excess over the total

interest on capital. But it is absurd to suppose that a private Company managing such a concern on strictly commercial lines would not take credit for the other advantages inherent in a canal. A company would in the first place acquire the whole area affected by the canal. It would thus benefit by the increase in sub-soil water, which improves unirrigated crops, by the increase in the yield of wells, by the increase in trees, in fish, in leaf manure. It would also farm the land to its highest capacity, spending money freely on it, and would receive as return the whole of the enhanced yield. Even if it sub-let the land it would make a far harder bargain than the Government does, and would reserve to itself numerous benefits which the Government takes no account of. Managed on these lines, irrigation works would show magnificent profits. It is not pretended that a Government should adopt the same course as a private company. It would be impossible or at the least most impolitic. But in calculating profits a Government should take these things into account. Those who framed the rules were probably unacquainted with the whole facts. They were apparently compiled by the Accounts Department without the collaboration of Engineers and Revenue Officers. They should undoubtedly be altered so as not to blur the facts, and to enable those in authority to know the actual situation.

With these obstacles removed, there would ensue a change in public opinion and a large expansion in the use of public money for what would be admitted to be the advantage of both the taxpayer and the Government. There are moreover some recent developments in engineering which will be of the greatest service. The invention of Stoney's sluices has enabled high masonry dams to be built across large rivers without the necessity of a high-level escape, or waste-weir for the discharge of floods. Formerly a high dam could only be built where the configuration of the ground rendered it possible to construct such escapes at a convenient level, and the choice

of sites was thereby severely limited. These sluices however can be controlled at great depths below the water and can therefore be built in the body of a dam itself, and other escapes can be dispensed with. They have been hitherto expensive, but the patent has now expired, and there is no reason why they should not be constructed at a very small cost. One firm alone in England has gone to the expense of the necessary plant for making them quickly and cheaply, and this firm still commands the market. In a country where they will be so much in request as India the Government should certainly make arrangements for the manufacture of these sluices in their own workshops. Another valuable novelty is Colonel Smart's movable weirs, which are also quite simple and are being extensively employed. By their means anicuts or low dams across rivers can be built as a line of movable sluice gates instead of an immovable length of masonry. The water in the river can thus be much better controlled and the flood level kept down, and the bed of the river can be kept from silting up to the level of the crest of the anicut. These are priceless advantages and will ensure the apparatus a very wide application. In the utilisation of these weirs Madras is at present many years in advance of the rest of India, but their use is spreading, and it is improbable that in future the old solid masonry anicut will ever be built across a large river except under very special circumstances.

A. T. MACKENZIE.

THE PIONEER OF IRRIGATION.

GENERAL SIR ARTHUR COTTON, R.E., K.C.I.E.

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A CHRISTIAN MISSIONARY ON ISLAM.

WHILE France and Germany pour forth volume after volume of sound scholarship on Oriental and particularly Islamic subjects, England shows but listless indifference towards such studies. It is all the more astonishing when we take into account the intimate relation which subsists between her and Muslim countries. The contributions of England towards Oriental Learning during the latter end of the eighteenth century and the earlier portions of the nineteenth were by no means mean and inconsiderable. But of late we have been noticing among English writers a marked tendency towards holding up to the world the tyrannical acts of isolated Caliphs and thereby showing that Islam breeds vices of the worst type and fosters nothing but hatred and bitterness towards non-Muslims.

Now to pass on to the book under review, Mr. Sell has published under the title of "Essays on Islam"* a series of papers dealing with Islamic subjects. At the very outset we must say that his papers do not take us an inch beyond the familiar and trodden grounds. Nor can we say that his book is free from those defects which so completely mar and disfigure the works of a prejudiced writer. He has approached the subject less with the idea of discovering truths than of establishing the accusations so frequently and constantly levelled at Islam. His burthen is to substantiate the charges of Muslim intolerance and of the inadaptability of Islam to advancing civilization. As for his facts, we believe that he is wholly indebted to Von Kremer whose *Geschichte der Herrschenden Ideen des Islam* is evidently the basis of his work. But, with great reluctance, we are compelled to confess that Mr. Sell possesses neither the profound scholarship, nor the broadness of vision nor the large-hearted sympathy of the German savant.

* *Essays on Islam* by Rev. E. E. Sell, S. P. C. K. Press, Madras.

Mr. Sell on page 2 says: "The third century found the Zindiq and Motazala controversies at their height." We are absolutely unable to understand what the learned author means by the "Zindiq" controversy. The word *Zindiq* is thus explained in *Kitab-ul-Maghrib*: "*Zindiq* is a well-known epithet generally applied to those who deny a future life, the immortality of the soul and the unity of God. Tha'leb says that the word *Zindiq*, like the word *firsin*, is not Arabic and that its meaning is a heretic, an impious man. In the work entitled *Miftah-ul-olum*, it is said that the Zanadikah are the same as the followers of Mani (Manichasans) and that the Mazdakis were also called Zanadikah." The use of the word "*Zindiq*" is clearly obscure if the author means by it that the third century witnessed controversies relating to the immortality of the soul and the unity of God. As far as our studies go, we are not aware of any controversy which is known as *Zindiq controversy*.

His paper on the Babs and the Babis is but a summary of the admirable work of Mr. Browne, the celebrated Persian Scholar, and we need not discuss it here. We can without hesitation recommend it to the reader as a handy and well-summarised paper.

On page 187, Mr. Sell quotes a series of enactments of different Caliphs against non-Muslims by which he evidently intends to point out the intolerable burden and disabilities under which non-Muslims laboured under Islamic rule. Let us pause here to consider what really was the position of non-Muslim subjects under Muslim masters. We had better start from the time of the Prophet: Witness the treaty which Mohamed concluded with the Christian Prince of Aila. It runs thus:—In the name of God, the gracious and merciful, a compact of peace from God and Mohamed &c. etc., granted unto Yuhanna (John), son of Rubah and with the people of Aila. For them who remain at home and for those who travel by sea and by land there is the guarantee of God and of Mohamed

the Apostle of God, and for all that are with them, whether of Syria or of Yemen or of the sea coast. Who so contraveneth this treaty, his wealth shall not save him; it shall be the fair prize of him that taketh it. Now it shall not be lawful to hinder the men of Aila from any springs which they may have been in the habit of frequenting, nor from any journey they desire to make whether by sea or by land." (See Gibbon, Bury's Ed. Vol V. p. 539). There is not a word which we can find fault with here. To proceed further. Did the early Caliphs impose disabilities or draw invidious distinctions between Muslims and non-Muslims? History answers this question with an emphatic negative. Be it remembered that Omar, whose assassin was a non-Muslim, was yet so profoundly solicitous of the welfare of his subjects that, before taking his final rest, he gave among others this advice to his successor: "Lastly, said Omar, I recommend to him (his successor) for the sake of God and his Prophet that he should keep the treaties concluded with 'the unfaithful' and wage not war with those already reduced to subjection nor lay burden upon them (non-Muslims) which are beyond their power." (Von Kremer, *Culturgeschichte* Vol I, pp. 16-17).

Again, it will be idle to shut our eyes to the fact that for years non-Muslims had had the financial and revenue departments under their control. They alone held offices in these two departments and that, forsooth, at the time when the fire of Muslim zeal was shining clear and bright. Two most important functions under the Caliphs were those of the *Vizir* and the *Katib* and non-Muslims under more than one Caliph enjoyed these high dignities. Abdul Malik's *Katib*, *Ibn-Surjun* was a Christian; *abu Ishaq Shabi* held the same post under the Abbasides and the *Vizir* of *Asaddud Dowlah*, *Nasir Bin Herwan*, was likewise a Christian. It may be interesting to those who carp and cavil at Islam to know that *Omar Ibn Abdul Aziz* wrote to *Abu Bekr Ibn Mohamed*: "Examine the public books, and if any injustice has been done before my

time to a Muslim or a non-Muslim ally, give back what belongs to him. (Weil, *Geschichte der Chalifen* Vol I, p. 589, note 4). At this point we cannot refrain from quoting an incident connected with St. John's Church at Damascus. The account is taken from Beladhori's *Futuh-ul-Buldan* (p. 125) and is an eloquent commentary upon Muslim tolerance. We are quite prepared to concede that Muslims were never advanced enough to pass an act like the Land Acquisition Act and put its provisions into force whenever policy or prudence dictated that course. However, be that as it may, Beladhori's account runs thus:—"When Moawiah was appointed Governor he wanted to incorporate the remaining portion of the Church of St. John into the Mosque at Damascus. It is to be remembered, however, that half of the Church of St. John had already been converted into a mosque under Omar. The Christians would not allow him. So he desisted from his purpose. Then, Abdul Malik, during his Caliphate, desired to do the same and offered the Christians large property for it, but they declined to give it up. Then *Walid Bin Abdul Malik* gathered the Christians during his Caliphate, and offered them large property to induce them to give up the remaining portion of the Church. They likewise refused. Then he said "If you don't give it up, I shall have it forthwith demolished." Then some of them said:—"O *Emir-ul Mumenin*, whoever demolishes a Church, he becomes either mad or is stricken with some bodily infirmity." This he took to heart. Then he sent for a hatchet and commenced to demolish one of the walls with his own hand, and at that time he was dressed in yellow silk. Then he gathered workmen, and they demolished it and extended the Mosque. When Omar Ibn Abdul Aziz became Caliph, the Christians complained to him as to what Walid had done with their Church. Then he wrote to his governor to give back what had been taken for the Mosque from the Christians. The people of Damascus were annoyed with this order and said: "Shall we demolish the Mosque after we

had called out Azans from there and prayed in it and allow it to be converted into a Church again?" They went to the Christians and offered them to restore all the Churches at *Ghoota* (?) which had been taken by force and were then in the possession of Muslims on condition that they should desist from claiming back the portion of the Church of St. John which had been incorporated into the Mosque under Caliph Walid. They consented.

The broad sympathy of the Abbasids is too well-known to require an amplification here. Under Mansur, the Christians of Gondeshapur obtained a permanent footing at the Court of the Caliph, and the Christian savants, in general, were treated with the utmost respect and consideration. In Müller's, *Islam im morgen und abendland* the reader will find a detailed account of Christians of Gondeshapur. Want of space forbids me from going into any detail here. The names of Harun and Mamoon shine forth with sufficient brilliance in the literary firmament to demand a notice here. Suffice it to say that men like Gabriel, Salamooya, Honain Bin Ishaq, Johanna Bin Massoya, Ishaq Shaby—all Christians indeed—adorned the Courts of the Abbasids Caliphs.

Caliph Motazid Billah, who never allowed any person, whoever he might be, to take a seat in his *Durbar*, relaxed this rule only in favour of his Vizir and *Sahib Bin Quora* a non-Muslim again. Motawakkil was really the first Caliph who made Christians and Jews dress differently to Muslims. But we must not forget that this was the man who desecrated the tomb of Hosain and set at naught the most cherished principles of Islam. Can he be cited as a model and a pattern of Muslim virtue? His diabolical acts have earned for him a reputation which can hardly be deemed an enviable one. In connection with this subject, it is well worth remembering that far from despising the customs and costumes of their subjects, Muslims accepted the conquered as their intellectual masters and learnt from them what they could teach. Nor did they scruple to assume and adopt their dress and

even ways and manners. Witness Mamoon and Motassim Billah. (Masudi, p. 300, Vol. VIII, Paris Edition). Saladin, in whom were combined the qualities of a saint and a warrior, was invariably surrounded by a number of Christians. His liberality towards his opponent, Richard of England, and his uniform kindness towards the Europeans who came into contact with him, served indeed to make him the idol and hero of the mediæval world. Even the most Christian poet, Dante of Florence, assigns him a place in Heaven while he relegates Constantine into Hell. Let it be noted that the Christian bards sang praises of him and a mediæval historian speaks of Saladin as one who never broke his word and that, indeed, in an age when Christians violated, with levity, the most solemn treaties concluded with Muslims.

"Be faithful in the keeping of your contracts, for God will require an account of such at your hands." (Koran, XVII 36). This maxim was cited by El. Hakem Bin Abdur Rahman in reply to the demands of his cavaliers for a declaration of war upon the Christians of Galicia. Compare with it the declaration of the Council of Constance concerning the safe conduct granted by Sigismund to Hus; "Cum dictus Johannes Hus fidem orthodoxen pertinaciter impugnans, Se ab omni conductu et privilegio reddiderit alienum, nec aliqua Sibi fides aut promissio de jure naturali divino vel humano, fuerit in præjudicium catholicæ fidei observanda (See Walker's Law of Nations, p. 78).


We hope to discuss this subject at length on another occasion. A few words more and we have done. We expected that Mr. Sell would give us a chapter on the influence of Christian theology on Muslim thoughts. But we look for it in vain. It is a subject which might well be discussed and if it is ably handled it will undoubtedly throw a flood of light on many obscure questions of Muslim philosophy and theology.

Mr. Sell's paper on the Koran deserves the attention of the reader.

We shall conclude by observing that in dealing with any subject it is as well that we should lay aside all our natural prepossessions and prejudices and look at it from a perfectly just and dispassionate point of view. Unless that is done, history will sink into a mere commonplace controversial literature. Fustel de Conlanges has truly said "that it is not I that speak, it is the documents that speak." The personality of the writer must remain in the background if he hopes his work to be impartial and instructive.

S. KIUDA BUKISH.

A FEW NOTES ON THE CHANGES OF INDIAN STAMPS DURING HALF A CENTURY.

 THE appearance of three new stamps bearing the portrait of the King-Emperor marks the commencement of a new era for philatelists in this country. It is half a century since the first stamp for franking letters appeared for the Scinde District; these were the first Indian stamps and were introduced by Sir Bartle Frere; this issue which for many years was known as the Scinde *Dak* issue (Collectors thinking that *Dak* was part of the name of the country) was superseded by the first general issue for British India in 1854. The new issue consisted of four stamps of the value of $\frac{1}{2}$, 1, 2 and 4 annas, the two lower values are still very common although the issue was in use for only one year—a fact which proves the great benefit which a general postal arrangement conferred on the public. These four stamps were used for ordinary correspondence, and without either the word "Service" or "On H. M. S." for Sircar purposes, but many of the official letters bore no stamp at all.

In 1855 a new design for the four annas value, and a new value eight annas were introduced; this is known to collectors as the "blue paper" issue, and in the following year a complete set from $\frac{1}{2}$ to 8 annas in the new design appeared. This is the "no watermark" issue and the $\frac{1}{2}$ and 1 anna stamps are still very abundant. In those far away days the rupees was a rupee not a shilling and a fraction, but as the rupee depreciated new and odd values were issued such as the 8 pies of 1860, the 6 annas 8 pies of 1866 and the 9 pies of 1874. In the year 1865 it was decided to use watermarked paper and the "Elephants head" series came into use—the stamps are identical in design and can only be distinguished from the 1855 issue by the watermark.

During 1866 a new value 6 annas was required; so "foreign bill" stamps of that value with the top and bottom labels cut off, were surcharged "Postage" and used for a short time, and shortly after

the four annas stamp was altered in design and a new type with profile of the queen in a circle appeared, and accompanying it was the 6 annas 8 pies stamp already referred to; this new value was for use on letters from India to England.

From 1868 to 1874 there were a few changes, a new die for the 8 annas was made, differing in the diadem, and the $\frac{1}{2}$ anna, which was naturally the most used, was recut, that is to say the die from which numerous plates had been manufactured, having shown signs of wear, was re-engraved and the lines strengthened. A 9 pie value was added to the list and a high value 1 rupee (slate) made its first appearance; then followed a 6 anna value which curiously enough is still in use, having had a lifetime of twenty-eight years, eight years longer than any other stamp in this country.

The only other new value to appear before the great change in 1882 was a 12 anna stamp.

In 1882 a complete new issue with watermark star (of India) was introduced; it was a long set consisting of $\frac{1}{2}$ anna, 9 pies, 1 anna, $1\frac{1}{2}$, 2, 3, 4, $4\frac{1}{2}$, 8, 12 annas and 1 rupee and for just twenty years these stamps have been the current issue, with slight modifications.

The new value $4\frac{1}{2}$ annas was issued for the new letter rate to England—a reduction of 2 annas and 2 pies on the old rate. In 1891 this rate was again reduced to the universal postal union rate of $2\frac{1}{2}$ annas, so the $4\frac{1}{2}$ anna stamp was surcharged with the new value, and was superseded a few months later by a new $2\frac{1}{2}$ annas stamp similar in general design to the old $4\frac{1}{2}$, and a new bicoloured 1 rupee value appeared, the first bicoloured stamp since the 4 annas of 1854.

For forty years India was content with a 1 rupee stamp for its highest value, but the extension of the parcel post and of heavy insurance created a demand for stamps of higher denominations; hence the appearance of the large bicoloured 2, 3 & 5 rupee stamps.

In 1898 a new book post rate of $\frac{1}{4}$ anna was introduced, and as it was necessary to issue a

stamp at once, the $\frac{1}{2}$ anna value was surcharged "1" and this was soon superseded by the 3 pies carmine which is still in use in most of the offices in the south of India. About the same time the issue of the $1\frac{1}{2}$ annas was stopped and although this stamp is still frequently used no more sheets were ordered from the printers.

In 1900 India conformed to the Postal Union Colours i.e., yellow-green for the equivalent of 5 centimes, red for the 10 centimes and blue for the 25 centimes, so the $\frac{1}{2}$ anna was changed from deep green to pea green, the 1 anna from purple brown to carmine, and the $2\frac{1}{2}$ annas from green to pale blue, and as the new colour for the 1 anna was that already in use for the 3 pies value it was decided to change the colour of that value also and it came out in pale grey.

These were the last stamps issued bearing the portrait of the Great Queen, and so large was the stock of the previous issue that some of the Post Offices have never received them but superseded their stocks of the previous $\frac{1}{2}$ anna and 3 pies stamps by those bearing the Emperor's head.

It will therefore be seen that within four years India has had four varieties of the 3 pies stamp and in twenty-eight years only one 6 annas stamp.

On Coronation Day the 9th of August the 3 pies, $\frac{1}{2}$ and 1 anna stamps with Emperor's head appeared, and the rest of the issue is expected in January 1903.

In 1866 it was decided to overprint stamps for official use; so the word "service" in small letters was overprinted on the stamps and the following year a larger fount of type was used, and in 1874 the surcharge was altered to H. ^{ON} s. an overprint which is still employed though with a different setting as the 1892 stamps are of larger size.

Indian stamps with "Postal Service" overprint are used for checking accounts in the books dealing with customs duty collected through the post.

"C. E. F." was the overprint employed in 1900 for the stamps used during the China Expedition, and values from 3 pies to 1 rupee were thus overprinted.

E. W. WETHERELL.

THE PHILOSOPHY OF BENJAMIN KIDD.

TWENTY years ago, Mr. Kidd, then almost unknown to fame, suddenly rose to distinction as an eminent thinker by the publication of his "Social Evolution." This work, by the boldness of its views and the charm of its style, created quite a stir in the world of thought and secured a popularity which seldom falls to the lot of more enduring masterpieces of philosophic speculation. Its main thesis is that Natural Selection is the essential condition of human progress. The survival of the fittest and the constant extinction of the much more numerous unfit is the only condition under which social systems and the men of whom they are constituted will not deteriorate and decay. The holocaust of the many is necessary for the progress and existence of the few. Under these circumstances there is no rational sanction for the progress of mankind. Man at a certain stage becomes endowed with a certain faculty called Reason. This faculty enables him to reflect on the conditions under which he lives, and is inevitably directed to his own personal well-being. His own personal interest he has always found and still finds to be at variance with the conditions which are necessary for the existence and progress of the society of which he is a member, and, therefore, if he simply followed the dictates of his reason, he would refuse to submit to these conditions. The possession of reason must involve the opportunity of escape from a life of constant rivalry and competition with his fellows with all the attendant results of stress and suffering to some and failure to reach the full possibilities of life to large numbers—conditions which and which alone make the upward march of humanity possible. Now the question is, how is the possession of reason ever to be rendered compatible with the will to submit to conditions of existence so onerous, requiring the effective and continual subordination of the individual's welfare to the progress of a develop-

ment in which he can have no personal interest whatever? To effect the needed reconciliation, religion is invoked as a force controlling and modifying the action of reason. It is the function of religion to constitute the subordinating factor in human evolution and to supply the ultimate sanction for that effort and sacrifice necessary to the continuance of the process of evolution proceeding in society, but which man, as a reasoning creature, is, in the nature of things, precluded from ever finding in his own reason. In religion is found the characteristic feature of human evolution and the essential motive force from which all progress in society proceeds. While every form of religious belief has thus a necessary function in the evolution of society, Christian religion alone has supplied an ultra-rational sanction for conduct of extraordinary strength and efficiency and provided the sublimest conception of self-abnegation that has ever moved humanity. It is the most potent evolutionary force that has been behind the entire process of European civilisation. "Beginning with the abolition of slavery it has slowly undermined the position of one after another of the ruling classes who obtained under an early social organisation powers that have been undergoing restriction; extended political power in ever-widening circles to the peoples; and at last brought us to a time when men have set before their minds as an object of practical endeavour a state in which, for the first time in the history of the race, all the excluded masses of the people shall be brought into the rivalry of life on terms of equality of opportunity."

These views which Mr. Kidd put forward in his earlier work with a force of reasoning and wealth of illustration which at once arrested the attention of eminent thinkers, he followed up and carried to further issues in his recently published "*Principles of Western civilization*."* He takes his stand as before on the principle of Natural

Selection as the operative factor in organic evolution, but interprets it in a manner which makes it somewhat unintelligible and mystical. "When we look," he says, "at the statement of the law of Natural Selection as Darwin left it, it may be perceived on reflection that there is a consequence involved in it which is not at first sight apparent. It is evident that the very essence of the principle is that it must act in the manner in which it produces the most effective results. It must act through the medium of the largest numbers. The qualities in favour of which it must, in the long run, consistently discriminate are those which most effectively subserve the interests of the largest majority. Yet this majority in the processes of life can never be in the present. It is always, of necessity, the majority which constitutes the long roll of the yet unborn generations. Other things being equal, that is to say, the winning qualities in the evolutionary process must, of necessity, be those qualities by which the interests of the existing individuals have been most effectively subordinated to those of the generations yet to be born. It cannot, in short, have been simply the qualities useful to the individuals in the mere struggle for the present existence which have directed the process of Natural Selection as a whole. When that process is viewed in operation over a long period, this fact becomes evident. In the strenuous æons of time, during which progress followed its upward path, it must have been, on the whole, in the evolution of qualities contributing to the interests of the vast majority in the future that the controlling meaning of the deeper life-processes always centred. It must have been in the interests of this majority that the Natural Selection, in the long run, continually discriminated. It must have been always these infinitely large interests in the future that over-weighted all others. Nay, we may go so far as to say that, under the law of Natural Selection, as we come to understand it in this light, the interests of individuals, in those adjustments

* *Principles of Western Civilisation*. By Benjamin Kidd. Macmillan & Co. London 1902.

profitable to themselves which filled so large a place in the minds of the early Darwinians, have actually no place, except in so far as they are included in, and contributed to, this larger end in the future." Thus "the subordination of the present in the interests of the future" or the principle of Projected Efficiency, as Mr. Kidd styles it, is the mighty key which he applies to explain the characteristic phenomena of Western civilisation,—of the ancient city state, of early Christianity, of the mediæval Church and Empire, of Protestantism and modern Democracy, and of the great social and economic movements of the present.

The principle of Projected Efficiency on which Mr. Kidd builds his whole theory of progress seems altogether a novel and fanciful version of the law of Natural Selection and is manifestly opposed to the facts of organic development. It is an established fact of Science that Natural Selection operates by taking advantage of variations which are primarily beneficial to the creature itself under its complex relations of life. It is because the variation is beneficial to the individual that it is preserved and accumulated for future generations. Otherwise the individual will be stamped out of existence, leaving no posterity, good or bad and Natural Selection would have no material to work upon. Natural Selection, strictly speaking, regards, not the future, but adaptability to present environment. A race or individual survives at every step by its fitness for actual conditions of existence and cannot possibly succeed in virtue of qualities which fit it for the future unless they also fit it for the present. Natural Selection can only determine the future by eliminating the unfit and suffering the fit to survive. It is Natural Selection which determines the future, but not the future which controls Natural Selection. The struggle for existence is always carried on with the contemporaries in being and not with unborn and non-existent generations. The laws of heredity are, however, such that in most cases a

well-equipped animal will beget well-equipped offspring. All existing species are descended from parents who made good provision for their offspring, but it is absurd to conclude from this that the forefathers of the existing species were preserved in the struggle for existence, because they begot good offspring. The ancestors of the existing offspring survived because they were well-equipped for the universal struggle as it was fought in their own day, and the descendants have survived because they were able to hold their own when they in their turn had to bear the brunt of battle. The ancestors did not survive because they begot good offspring, but the offspring survived because they were descended from well-adapted parents. Mr. Kidd confounds cause with effect, result with purpose, and lands himself in the preposterous position that the sacrifice of actual fitness in consideration of something that will be fitness hereafter is the essential condition of all organic and social development. Mr. Kidd's theory of Projected Efficiency further reduces human life to a futility, a pursuit of a goal never attained and ever unattainable. As was remarked by a recent critic, "the present generations are sacrificed to the interests of those that are to follow, but they cannot be said, any more than their predecessors, to reap the fruits of those sacrifices. They are the victims of the same stress and strain in the interests of hungry generations to come, whose feet are at the door but who will likewise be sent away empty from the Barmecide feast of existence. Once embarked upon this process, there is no possibility of stopping anywhere and when realised it reduces the cosmic process to a manifest futility, making it the pursuit of a goal which is nowhere reached and to which, in strictness, owing to the conditions of the case, we can never make any nearer approach." If generations of men are to take no interest in their own welfare but are always to be sacrificing it to an ever-receding future, what possible meaning can they have in human life?

The bulk of the book is occupied with a review of the phases of Western civilisation in the light of the principle of Projected Efficiency. Mr. Kidd divides the social evolution of mankind into two great periods—the first, the pre-Christian epoch of the “ascendency of the present,” characterised by “the supremacy of causes which are contributing to social efficiency by subordinating society merely to the existing political organisation”, the second, the Christian or modern epoch of “the control of the future,” characterised by the supremacy of the causes, “which contribute to a higher type of social efficiency by subordinating society itself with all its interests in the present to its own future.” In the former epoch all mankind were represented as centring their lives and thoughts on the aims and interests of the present hour alone and lying under the shadow of the present without hope or ideal in the future and in the latter, they are represented as being possessed with a sense of the infinite and projecting their centre of action out of the present into the ideal future. The two epochs represent fundamentally antagonistic types of civilisation, the one dominated by the ideal of force and the other by the wider ideals of duty and obligation. The transition from the former to the latter period was brought about by Christianity, an evolutionary principle of entirely new significance, which has for the first time presented to the world an infinite ideal of self-subordination and self-sacrifice, involving the absolute negation of the ruling principles which had hitherto moved and shaped the development of the world in the past.

The division of the history of mankind into two opposing and utterly irreconcilable stages and the unique and transcendental importance attached to Christianity as the controlling and determining force of modern civilisation are points which it is difficult to establish either on historical or philosophical grounds. Mr. Kidd throughout fails to recognise the fact which the law of evolution demands, namely, the continuity of human progress and

civilisation. The growth of every institution implies a continuous reconstruction and readjustment of the existing order; and the assumption of a discontinuity caused by the action of inscrutable forces amounting almost to a cataclysm is subversive of the evolutionary principle. The present is the heir of the past and the womb of the future, and they are all merely stages in a single, continuous, and unbroken process of development. It is really strange that Mr. Kidd with his almost apostolic faith in the doctrine of evolution should have committed himself to a position so fundamentally antagonistic to it. He fails also to recognise the Grecian and Roman elements in modern civilisation. As was pointed out by Sir Henry Maine, whose historical erudition and insight were beyond question, except the blind forces of nature, nothing moves in the modern world which is not Greek in its origin. Sir Frederick Pollock says:—“Greece is to us the mother of almost everything that makes life worthy to be lived.” The great scholar and historian, the late M. Renan observed:—“Our science, our arts, our literature, our moral code, our political code, our strategy, our diplomacy, and our international law are of Greek origin.” The connected scheme of virtues and duties within which the educated conscience of Christendom moves still remains in its essential outlines what Socrates and his successors left it in pre-Christian centuries. The Roman jurisprudence, which is a noble monument of practical wisdom and patient industry, still forms the basis of the municipal law of most of the countries of Europe and furnishes an inexhaustible store of general principles for the decision of questions which are not settled by statute, precedent or usage. It can easily be proved that every institution which Mr. Kidd characterises as the distinguishing feature of modern Christian civilisation has its roots in the philosophical and practical achievements of the Hellenic and Roman genius.

Christianity is itself a product of pre-Christian ideas. It cannot be regarded as an isolated pheno-

menon severed from all connection with the thought and culture of pre-Christian times. Had not the spiritual and moral consciousness of mankind been already developed through the discipline of earlier religions, it could not have gained a hearing at all in the world. The characteristic universalism of early Christianity which knew no distinction between man and man could have awakened no response in the hearts and minds of men, had not the ancient world already attained political and mental unity on the broad basis of Roman civilisation and law.

"The idea of a community of all mankind as opposed to the small civic communities of earlier days began to approach a realisation in the great Empire which had gathered all civilised men under its wings, had secured for them peace, order, and a just administration of the laws, and had admitted every one, whatever his race, tongue, or birth-place, to a career of honourable ambition in civil and military office, a career whose possibilities included even the imperial dignity itself."

This all-embracing commonwealth distinctly foreshadowed in the Greek philosophy and the writings of Cicero and consummated in fact by the wisdom and energy of the Roman statesmen and administrators is the real preparation for Christianity. As to the derivative character of its cardinal doctrines, we may quote the well-known utterance of no less a man than Cardinal Newman. "The doctrine of the divine word is Platonic, the doctrine of the Incarnation is Indian, of a Divine Kingdom is Judaic, of angels and devils is Magian." There is not a single idea in Christianity which cannot be traced to pre-existent religions. In the most remarkable words of St. Augustine,

"The essence of that which is now called the Christian religion existed in the ancient world. Never indeed, was it lacking since the human race began till the day when Christ came in the flesh. Henceforth true religion, which already existed, took the name of Christianity."

Mr. Kidd describes Christianity as an evolutionary force of the first order in the world. The one central phenomenon which constitutes not only the essential fact of its inner life, but the

distinctive principle to which its evolutionary significance is related, is the opening in the individual mind of the terms of a profound antithesis which it becomes impossible to bridge in any scheme of ethics, conceiving a self-centred equilibrium in the present time; or in any standard of duty in which virtue is made to correspond to conformity to the conditions of the existing world around us. This sense of the innate and utter insufficiency of the individual in respect of his own nature to fulfill the standards required of him by any merit, however transcendent, raises human consciousness out of the conditions of the existing world and brings it under the control of the future and the infinite. Mr. Kidd, therefore, contends that Christianity expresses that "larger principle of the evolutionary process which is destined in time to control all the phenomena of history"—the principle namely, "that the present and all its interests are by necessity inherent in the evolutionary process, to pass entirely under the control of the future and the infinite." But the Christian antithesis between the present and the future is something quite different from that which Mr. Kidd speaks of as being inherent in the evolutionary process. The future of Christianity is ultra-mundane and transcendental, involving anticipations of heaven and hell, whereas the future of the evolutionist is entirely mundane and within the limits of human intelligence. "In the view of early Christians ordinary human society was a world temporarily surrendered to Satanic rule over which a swift and sudden destruction was impending." They consequently did not believe and felt little or no interest in any future for the race. The future they looked for was a future for the individual in another world outside the cosmic process altogether. So far from embodying the evolutionary principle, Christianity, as understood and practised by its most accredited votaries of early ages, is quite inconsistent with that principle.

It cannot, however, be denied that Christianity exerted a most profound influence on the march of

Western civilisation, but it is manifest perversity to trace that influence to the sense of antinomy inherent in human nature, the sense, that is, of discrepancy between the satisfaction to be derived from the present and the higher satisfaction of the future which it is supposed to have awakened in the human consciousness. The ideals of universal brotherhood, of righteousness and love, which it preached with soul-stirring earnestness and fervour unknown in its predecessors or precursors filled the heart of man with new hopes and new aspirations and raised him to a higher level of social and moral efficiency. They tended to a great extent to humanise life by tempering and limiting the ruthless action of Natural Selection. It is surprising that Mr. Kidd should have relegated these operative forces to the background and brought into undue prominence as constructive principles those elements of Christianity which made for sterility, asceticism, and withdrawal from domestic and civic life.


In the survey of European history from the ancient to the modern period, Mr. Kidd lays down many generalisations which it is impossible to discuss with any degree of adequacy within the limits of this review. We may, however, touch one or two points and sum up his conclusions in a few words. He re-states the fundamental formula of progress as one of gradual emancipation from the ascendancy of the present to a frank and conscious surrender to the control of the future. The direction of advance among the modern nations has been towards the political and social enfranchisement of the masses, so that "the fact of our time which shadows all others is the arrival of Democracy." But Democracy means essentially "participation in the rivalry of existence on equal terms."

The democratic ideal is a condition of society in which the whole mass of excluded people will be at last brought into the rivalry of existence on a footing of equality of opportunity. Thus "the significance of the entire order of social change in progress among the Western peoples consists in

short in the single fact that this cosmic process tends thereby to attain the fullest, highest, and completest expression ever reached in the history of the race." In proportion as a society or nation refuses for considerations of immediate interest or personal ease to take upon itself the burden of the world-process, to that extent it falls behind in the selective struggle for the inheritance of the earth. This is the ultimate principle of division between the dead or dying nations and those to which the future belongs. The English-speaking peoples represent in this respect most truly the underlying principle in Western civilisation. Notwithstanding this laudation of unlimited competition and struggle for existence as the most precious instrument of social efficiency and the ultimate cause of progress, it has been found to break down at every turn and to issue, as Mr. Kidd himself admits, in the tyranny of monopoly and capitalism and in an uncontrolled and irresponsible scramble for political power and private gain. It has, of late years, led to the revival of fanatical individualism, and militarism, and "a recrudescence of barbaric ambitions, ideas and sentiments and an increasing culture of bloodthirst." We hear, now and then, vehement but ineffectual protests against this order or rather disorder of things, but time will certainly be on us when their truth and justice will be better appreciated and the cosmic and competitive principle will be replaced by the ethical and unifying principle of love to man and good-will to all nations as the governing factor of public as well as of private life. The feeling of altruism and human brotherhood, which Mr. Kidd claims to have first found full expression in the teaching of Christ, ought to permeate society to a much larger extent than at present. It is only then that the evils which threaten Western civilisation can be eradicated and the progress of humanity towards freedom and perfection made possible. So long as human beings act on the gladiatorial theory of existence which Mr. Kidd applauds, no amelioration in their lot can be expected. Mr. Kidd's attempt to reconcile the law of Natural Selection with the law of Christ is utterly futile. This is the aim of his philosophy and it cannot but be pronounced as a signal failure. He has, however, rendered great service by protesting, with deep earnestness and vehemence, against materialism and the cult of pleasure which so largely dominates modern thought and practice.

G. VENKATARAMAN

THE GAEKWAR ON THE INDUSTRIAL DEVELOPMENT OF INDIA.*

ENTLEMEN,--If I hesitated to accept your invitation to preside at the opening of this Exhibition, the importance of the occasion must be my excuse. You called me to step into the breach, to face publicly the most tremendous question of our times and to give you my solution of a problem on which no two people agree, except that it is urgent.

But I do not think that we realise how urgent it is. Famine, increasing poverty, wide-spread disease, all these bring home to us the fact that there is some radical weakness in our system and that something must be done to remedy it. But there is another and a larger aspect of the matter and that is, that this economic problem is our last ordeal as a people. *It is our last chance.*

Fail there and what can the future bring us? We can only grow poorer and weaker, more dependent on foreign help; we must watch our industrial freedom fall into extinction and drag out a miserable existence as the 'hewers of wood and drawers of water' to any foreign power which happens to be our master.

Solve that problem and you have a great future before you, the future of a great people, worthy of your ancestors and of your old position among the nations.

PARIS EXHIBITION.

Two years ago I stood looking at the wonders of that great Exhibition at Paris which summed up in so striking a manner, the progress of a century in Civilization, Industry and Commerce. If I were asked what struck me most in that noble and artistic effort of a great nation, I should answer—the magnificent proportions and excellent management of the undertaking, so vast in conception and admirable in execution, the efficiency of the orderly and illuminating arrangement and careful accuracy of detail, and after that, the extraordinary ingenuity displayed in the educational section in methods and appliances and not only the ingenuity but the thoroughness of these methods especially in the exhibits of Germany and America. But besides these two special exhibits, that which struck me most profoundly was the enormous difference between India and Europe to-day. Those vast halls crowded with shining steel work, the fruits of the combined industry and genius of a dozen nations; the amazing richness of texture and

delicacy of design in the products of those machines; the vigorous life and aspiration which glowed in the Art, as well as the clear precision of the knowledge reflected in the Science, all this impressed me more than I can say. But beyond all this triumph of Man over Nature and her powers, one fact struck me with a curious emphasis,—the enormous gulf which separates the European and the Native of India, in their ideas of comfort.

There rose up before me the interior of a typical Indian home and as I contrasted it with the truly surprising inventions around me, all devoted to that one object—refinement—our much boasted simplicity seemed bare and meagre beyond description. I contrasted those empty rooms,—without even a chair or a table,—with the luxury, the conveniences, which are the necessities of a European cottage. My mind went back to the Bazaar in my own City of Baroda, the craftsmen working at their old isolated trades with the methods which have sufficed them for centuries without a change, the low irregular houses, the dreamy life drifting between them, and then contrasted it all with this keen and merciless tide which was sweeping and eddying around me, drawing its needs from a thousand machines like these and gathering its comforts from the four quarters of the globe. And with the contrast I had a vivid sense of the enormous gulf, which we have to bridge over, before India can be said to be on the same plane as the European Nations.

And yet, I thought, there is a change coming over India. The appearance of our houses is being altered by the revolution which is being made in their furniture. It is slow, for, there are many who deplore it and speak of it in tones of regret as a process of denationalisation and a fall from simplicity to a burdensome and costly luxury. But the change is rather in the direction in which the money is spent. Our fathers made up by opulence of material for the poverty of convenience. The futility of such regrets is shown by the fact, that most of these eulogists of the past show in their own houses, even if only in a slight degree, the effects of the tendency which they deplore. I do not mean that we should dispense with simplicity, but let it be a wise moderation in the midst of plenty, not the fatalistic acceptance of poverty as a virtue in itself. And there can be no doubt that this tendency which is now in its initial stage, will grow in strength with the course of years until with the necessary differences due to climate and other environments, it brings us approximately near to the Western model of living.

But this model is a rich and costly model; to maintain it requires easy circumstances and a large

* Address delivered on the occasion of the opening of the Industrial Exhibition at Ahmedabad.

diffusion of wealth. A poor country cannot meet its demands. A country without flourishing manufactures must always be a poor country. The future, therefore, imperatively claims this from us, that we shall cease to be a purely agricultural country and vindicate for ourselves some place at least among commercial and manufacturing nations. Otherwise we shall only establish for ourselves the unhappiness of unsatisfied cravings and the benumbing effects of an ideal to which we can make no approach. The cravings must be there, they are inevitable and essential, to progress. To attempt to discourage them for political reasons or from social or religious conservatism is unjust and unwise and must eventually prove futile. The true policy is to provide that the cravings shall find means of encouragement; in other words, to encourage and assist the commercial development of the country and so put it on the only possible road to progress, opulence, and prosperity.

SUPPOSED INFERIORITY OF TROPICAL RACES.

There is a theory which affects to regard the races inhabiting the tropical and subtropical regions of the earth, as disinherited by some mysterious law of Nature from all hope of originality, enterprise and leadership. These things belong to the temperate regions; the tropics are to be for ever no more than the field for the energies of the superior races, to whom alone belong empire, civilization, trade and manufacture. We are to be restricted to a humble subordination, a servile imitation and the production of raw materials for their markets.

At first sight there seems to be some justification for this theory in existing facts. Our trade is in European hands, our industries are for the most part not our own, our Railways are built, owned and managed by European energy and capital. The Government is European and it is from Europe that we imitate all that we call civilisation. Our immobile and disorganized society compares ill with the enlightened energy and cohesion of Europe; even at our best we seem to be only the hands that execute, not the head that originates.

HASTINESS OF THE THEORY.

Yet even if we accept this picture of ourselves without the necessary modifications we need not accept this interpretation of inherent inferiority. For my part, I demur to any such hasty generalisation; but however much of this be true, be sure that there is no law of Nature which can prevent you from changing it. To suppose that any nation can be shut out from the operation of the law of Evolution is, utterly unscientific, and, in the light of History, absurd.

REASONS FOR DISBELIEVING IT.

Granted that originality among us is low, that enterprise is deficient, and that leadership has passed out of our hands; is there in the first place no qualification to the entire truth of the assertion? And in the second, is this state of things due to immutable causes and therefore of old existence or is it the result of recent and removable tendencies? It is true that such originality and power as we still possess has hitherto busied itself mostly in other paths than those of Industry and the Sciences which help Industry; it has worked chiefly on the lines of religion and philosophy which have always been the characteristic bent of the national mind continuing through Rammohan Roy, Dayanand Saraswati and Keshav-Chandra Sen, the long and unbroken line of great religious teachers from Goutama to Chaitanya and Kabir. It is true that teachings of fatalism and inactive detachment have depressed the vitality of the people. Yet there is no reason to believe that this depression and this limitation are not removable and constitutional.

But it is not only in Religion that we were great. We had amongst us brave soldiers like Shivaji, Hyder Ali, Mahadaji Scindhia and Ranjit Sing. Can we not again claim to have had an important share in the establishment of that mighty structure—the Indian Empire—erected indeed by the clear-sighted energy and practical genius of England but on the foundations of Indian patience, Indian blood and Indian capital?

It is not an insignificant system that, considering how recent and meagre is Scientific Education in India, we should be able to show at least some names that are familiar to European Scientists, not to speak of others enjoying a deserved reputation among ourselves. Small as the circumstance may seem it is yet enough to overthrow the theory of constitutional incapacity. And if we consider classes rather than individuals, can it be denied that the Parsees are an enterprising and industrially capable race? Or can it be doubted that the community which could produce a leader in industry and philanthropy like Mr. Tata, will, as circumstances improve, take a leading place in the commercial world? Or can enterprise and commercial capacity be denied to classes like the Bhatias, Khojas and the merchants of Scindh?

When we have individuals and classes like these in our midst we may well inquire, why is it that we stand so poorly in Industry and Commerce, without fearing that the answer, however ungrateful to our feelings, will lead us to despair.

But if this theory of the inferiority of the tropical races be untrue, if we find that in the past we had great men whose influence is with us even

to-day, we must look for some other cause for the difference and ask what is it that India has not to-day, but which she had in that older stage of her history and which Europe has at the present day.

We have not far to seek, it is obviously that clear and practical examination of life and Nature which men call Science and its application to the needs of Life which men call Industry in which we are deficient and in which Europe excels. And if we question the past we learn that this is exactly what has not come down to us through the ages along with our Religion and Philosophy.

Our early history is scanty and, in many respects, uncertain but no uncertainty, no scantiness can do away with the fact that there was once a great commercial people. We see a very wealthy nation with organised guilds of artisans, a flourishing inland commerce, a large export and import trade. We hear of busy and flourishing ports through which the manufactures of India flowed out to Europe, to Arabia and Persia, and from which, in those early times we sent out our delicate cotton textures, our chintz and muslin, our silk cloth and silk thread, a fine quality of steel; indigo, sugar, spices and drugs; diamonds, ivory and gold. In return we received brass, tin and lead, coral, glass, antimony; woollen cloth and wines from Italy, and also specie and bullion.

All through the Middle Ages, our manufactures and industries were at a very high level. Every traveller attests the existence of large and flourishing towns, (a sure index of industrial prosperity), and praises the skill and ingenuity of our workmen. It is on the Eastern trade that Venice built her greatness, for, then we were indeed "Gorgeous East." Notice, that it is especially in the manufactures which required delicate work, originality of design, or instinctive taste that our products were famous, our carving, our inlaid work and our gossamer cloth.

Coming now to the earlier part of the last century what do we find? The carrying trade has passed from the Arabs to the East India Company, and with it too, the control of nearly all our exports, especially those in Indigo, Iron and Steel, and the newly imported industries in Tobacco, Tea and Coffee. But there is still a large body of trade in Indian hands; even then our manufactures held their own and were far superior to those of Europe; even then there were thousands of skilled artisans; we supplied our own wants and exported enormous quantities of goods to other countries. Where, then, has all this trade gone, and, what has caused our decline.

The most obvious answer is, as I have said, the difference between Europe and India in Industrial methods and appliances. But this is not quite

sufficient to explain it. A deeper examination of the facts at our disposal shows that the life had left Indian Industry before Europe had brought her machines to any remarkable development, and long before those wonderful changes which the application of Chemistry and Electricity have more recently wrought in Industry. Nor can we ascribe it to a superiority which England possessed in Industrial and Technical Education; for at that time there was no such training and England has never relied on it for commercial capacity. If we go a little deeper into the matter we find that there is a further reason which does not depend on the natural working of economic laws but which is political in its nature, the result of the acquisition of political power by the East India Company and the absorption of India into the growing British Empire.

As Mr. Dutt shows in his able Economic History of British India, this political change had the gravest effect on our economic life. In the first place we have the economic policy of the East India Company which, so far as its export trade was concerned, accepted manufactures indeed, but paid an equal if not greater attention to raw materials. Even our internal trade was taken from us by the policy of the East India Company; there were heavy transit dues on all inland commerce and there were commercial Residents in every part of the Company's possessions who managed to control the work of the local artisans and so thoroughly that outside their factories all manufacture came to an end.

On this came the protective policy of the British Government, which despite the powerful interests of the East India Company crushed Indian manufactures by prohibitive import duties and then the application of steam to manufactures. It is scarcely to be wondered at, then, if with all this against us at home and abroad, our manufactures declined and with the great advance in the improvement in machinery and the initiation of a Free trade Policy this decline was hastened into ruin.

Moreover a country not exporting manufactures is necessarily stagnant and commercial progress and self-adaptability cease. Once the manufacturing superiority of India had been transferred to England, it was impossible for the weaker country to recover its position without some measure of protection. Not only was the struggle in itself unequal but the spectacle of a mighty commerce over-shadowing and dominating ours, flooding our markets and taking away our produce for its own factories induced a profound dejection, hopelessness and inertia among our people. Unable to react against this devastating force we came to believe

that the inability was constitutional and inherent in ourselves; there is a tendency in fact to hypnotise ourselves into apathy by continual repetition of the formula that Indians, as a race, are lacking in enterprise, deficient in business faculties, barren in organising power. If, therefore, I have dwelt upon our old manufactures and commerce and the way in which they were crushed, it is not with the unprofitable object of airing an old grievance but in order to point out that there is no reason for this discouraging view of ourselves. We were a trading and manufacturing country from ancient times down to the present century and if our manufactures have fallen into decay, our commerce languished, it was under a burden which would have crushed the most flourishing industry of the most energetic people.

Our weakness lies in this that we have for many years lain prostrate under the fictitious sense of our own helplessness and made no adequate attempt to react against our circumstances. We have succumbed where we should have exhausted every possibility of resistance and remedy. We have allowed the home-keeping propensities and the out-of-date semi-religious prejudices, which have gathered round the institution of Caste, to prevent us from choosing the line of activity most consonant with our abilities or from seeking other lands in search of fresh markets and the knowledge of new industries. The restriction against foreign travel is one of the most serious obstacles in the way of commercial success and must be utterly swept away, if we are not to go on stagnating. It is a pity that communities like the Bhatias should be restrained by an out-worn prejudice from going abroad and furthering that task of development for which they are so admirably fitted. The endeavours hitherto made, have been, with few exceptions, sporadic, half-hearted and prematurely abandoned; and the support given to them by the public has been scanty, wanting in confidence and in personal active interests. It is this state of things which must cease before we can hope to revive our old manufactures, to establish firmly and extend those, which exist; and to set on foot any new industries which our needs demand and for which the conditions offer sufficient opportunity; then India may again be what she was in the past and what she is so admirably fitted by nature to be,—a self-sufficing country, famous for artistic and useful industries; and to raise her again to this, should be the ideal of every patriotic citizen. But, in order that the ideal may be realized we need first, knowledge of our possibilities, of the means and facilities necessary for success, and of the lines on which activity would be best repaid,

and secondly, belief in ourselves and in each other so that our knowledge may not fail for want of co-operation.

If we get these, if we realize the progress of Science and Mechanical Invention and resolutely part with old and antiquated methods of work, if we liberate ourselves from hampering customs and superstitions, none of which are an essential part of our religion, if, instead of being dazed in imagination by the progress of Europe, we learn to examine it intelligently and meet it with our own progress there will be no reason for us to despair; but if we fail in this we must not hope to occupy a place in the civilized and progressive world.

LINE OF ACTIVITY.

To speak with any fulness on this subject is not possible within the short limit of time at my disposal. I shall, therefore, pass lightly over a few salient points; for the lines of activity, open to us and calling for, our energies, are unlimited in their extent, variety and promise. This country is not poor in its resources, but may rather be said to be blessed by Nature in many respects; its mineral wealth is anything but contemptible; its soil produces valuable and useful products in great variety and abundance; the provision of water power is also unstinted. We have an excess of cheap labour and we have hereditary artisans who are quick in hand and eye and who only need to be properly trained to make them the equals, if not the superiors, of their rivals. If there are certain serious disadvantages and defects in its mineral wealth such as the inferiority of its coal supplies and in its vegetable products, such as the greater coarseness of its cotton and the difficulty of growing the finest silk, yet so great is the advance Science has made that we need not despair of meeting some of these difficulties at least in part. Nor is there any imperative necessity that we should always vie with other countries in producing the very best. If we utilise to the best advantage what nature has given us and advance in such manufactures as the country is fitted for, we shall have done no inconsiderable task. What is required is greater knowledge, a more earnest endeavour of the Government towards improvement and the provision of facilities and more serious activity on the part of the people to take advantage of such facilities as already exist—improvement in Agriculture, facilities in Industries; for in a country like India which produces or can produce the bulk of its own raw material, the agricultural question cannot be separated from the industrial.

AGRICULTURE.

Improvement in Agriculture is necessary to secure an increased quantity and improved quality

of the produce of our fields. What Science can do for Agriculture the development of the Beet-sugar industry and the improvement of Cotton clearly show; and as Sugar and Cotton are two of the most important of our products and especially of our export trade I wish to call your attention to what has been done by our rivals.

Beet-Sugar cultivation has been gradually developed by careful selection of the best roots and the application of Agricultural Chemistry until the percentage of Saccharine has been doubled and trebled. Here is the remedy for Indian sugar. We must not be ashamed to borrow our rivals' tactics but strive hard to get the very best ones and take care to use nothing but the very best methods of cultivation and manufacture.

The same is true of Cotton. It is certain that the competition which Indian cotton has to meet will be much intensified in the near future and our only hope of meeting it successfully is to improve our indigenous varieties up to a point at which they can hold their own. I believe that we can do this, but it demands the most patient research and above all, that when the best variety has been discovered, the cultivator will really grow it.

Science is our great hope, but there is one great obstacle to be overcome before Science can help us; and, that is the ignorance and apathy which is the general condition of the agricultural classes at present.

The failure of the old arts and crafts, and especially that of arms, has thrown vast numbers back on the soil and these classes are neither intelligent nor progressive. Many old professions are dying out and while those, who should have followed them, go back to the land, many of these professions are not such as to provide any hereditary capacity for Agriculture. It is not to be wondered at, therefore, if our Indian cultivators, despite their traditional skill, are neither enterprising nor capable of undertaking improvements, which demand considerable energy and foresight. Their methods despite Dr. Voelcker's high encomiums, are backward, their resources are very limited and their implements, though they may be those best suited to their narrow means and small holdings, are old and economically wasteful. But their most serious drawback is their helplessness. There is a general complaint that the soil is deteriorating but that they can do nothing to remedy it and in times of scarcity and famine they seem incapable of doing anything to help themselves. This is a most serious question and one which demands all our attention.

In the first place this deterioration of the soil is a very real danger. Do you know that the average

product per acre has in some parts of the country diminished by 50 per cent. since the middle of the Seventeenth Century, when the Aini-Akbari was compiled? Is it any wonder that the peasant grows poorer, or that his resources diminish?

IMPROVEMENT.

Our remedies must fall under two heads:—

- (1) The improvement of methods, implements and general conditions and—
- (2) Education.

IMPLEMENTS.

In the first place the attempts to introduce new implements have nearly all failed. Iron flails and threshing machines have been tried at one time or another but the ryot will have none of them. At the same time this does not mean that the old implements are the very best that the wit of man can devise, and we are to suppose that the failure is conclusive.

CATTLE BREEDING.

Another matter to which Government has given some attention has been cattle-breeding. The results so far have not been encouraging, though there are Government farms at Hissar and at Bhadgaum in Khandesh, and another called the Amrit Mahal maintained by the Mysore Government from which are derived certain superior breeds of cattle to be found in the Madras Presidency.

But until we can get the co-operation of the people the result must be disappointing. Nevertheless, I think that there is a great deal of good work to be done on these lines and I am of opinion that besides improving the breed of cattle, much might be done in the way of encouraging the ryots to breed other stock, such as horses, mules etc. It is a thousand pities that our Indian breeds of horses should be dying out and that there seems to be no sensible effort made to keep them alive. Perhaps the chief reason that Government breeding farms have failed is that they are too elaborate for the people in their present condition. I believe that much might be done by reviving the old custom of keeping sacred bulls in every village and taking care that the bulls supplied were the best that could be procured, or if the cultivator could be persuaded to breed only from the best animals. One advantage of this scheme is that it can be carried out by private enterprise.

Instead of helping ourselves we always depend upon Government; here is an instance where the people can, with advantage, help themselves.

To it I would add the planting of trees, which are of economic value, round the cultivators' fields and the encouragement of the fibrous plants which are articles of commerce; the question

of good drainage to relieve the bad effects of irrigation and besides that, a serious endeavour to help the ryot to show only the best seed and to pay some attention to the best rotation of crops.

IRRIGATION.

But in a country like India where the introduction of improved implements is so limited in its possibilities and where everything depends upon the timeliness and sufficiency of the annual rains, it is Irrigation that must necessarily take the largest place in all plans for agricultural improvement. This importance of irrigation has been recognized by the successive Rulers of this country from the times of the ancient Hindu Kings. From the days of Asoka, and before him, the digging of wells and tanks had been the subject of royal edicts and one of the first religious duties of Princes, Zemindars and wealthy philanthropists. The number of small tanks in ruins that one finds in the districts, the multitude of old wells that still exist round about Mahomedan capitals, above all the immense system of artificial reservoirs in the Madras Presidency, bear testimony to the steady persistency of this old tradition of administrative benevolence. In the Southern Presidency there are over 6,000 tanks mainly of native origin, the magnitude of which will be best remembered when it is understood that the embankments measure over 30,000 miles, with 300,000 separate masonry works and that these tanks irrigate over 34 lacs of acres, an area almost equal to that irrigated by the entire system of the major and minor works of the Madras Presidency. These works were getting out of repair in the troublous times of the eighteenth century, when general disorder and maladministration, the usual concomitants of any violent change in the form of Government, prevailed in our country. The British Government when they occupied the country, with their characteristic administrative energy, not only put them in order, but in many cases improved and enlarged them. They have brought, or kept under irrigation, an area of little less than 20 millions of acres at the cost of 42 crores of rupees; and the work has been done with so much judgment and success, that the works yield a profit of nearly 7 per cent. and the produce raised equals 98 per cent. of the total capital outlay. Not content with this, they are now undertaking to prepare and gradually execute a scheme of protective works which, when complete, ought to do much to insure the country against famine. The work in irrigation will always be one of the most splendid and irreproachable chapters in the history of British rule.

The proposed extension of irrigation works would also offer to the capitalists of the country a

very eligible field for the investment of their surplus savings. If the people only co-operate they would find Irrigation projects a very profitable channel for investment; and if they fail to take advantage of the favourable opportunity one need not be surprised if European capital is extensively employed in their development as has been done in the case of Railways in India. I trust the Government on its part, will also offer more than usual inducements to attract private Indian capital in these profitable undertakings.

WELLS.

Besides great irrigation works there is another way in which much might be done to protect the country against drought, that is, by encouraging the digging of wells. This is a method well adapted for States which have no facilities for works on a grand scale. In my own territories I have found that the advance of Tagavi, for this purpose, was a measure which the cultivator could understand, and under the guidance of experienced officers, one which worked well. At the same time large irrigation works have been commenced in various parts of the territory and a survey is being made for the repair of old tanks and the utilization of favourable spots for the storage of water.

MANURE.

But it must not be forgotten that Irrigation will not end all our troubles. Indeed, unless it is accompanied by a considerable measure of intelligence and foresight, it brings others in its train, such as the debilitation of the soil. The remedy for this is, of course, the use of artificial manures which will restore to the soil some of the qualities which are removed from it by over-irrigation. But here we are at once faced by our usual want of foresight and ignorance of which I have already spoken. In the face of the deterioration of the soil, which I have mentioned as a widespread evil, widely acknowledged, it is inconceivable to me that we should seek to encourage the export of cotton-seeds on which so much of the efficiency of the simple manure, which we use here in Guzerat, depends. Yet the value of this export has risen in one year from five to fifty lacs of Rupees, and it is certain that at this rate the cattle will have to go without it and that their manure will become practically valueless. An artificial manure is, therefore, a crying necessity.

Another point is the growth of deep-rooted grasses which can resist drought and so prevent the terrible mortality of cattle which was so painfully marked in the late famine. We must follow the example of Australia in this matter and find indigenous deep-rooted grasses which we can plant systematically on waste land and then, when we

are cursed with another season of drought we shall have something to meet it with.

GENERAL IMPROVEMENTS.

But before we can hope that the ryot will try to employ measures which demand a high level of intelligence and scientific knowledge, we must awaken his curiosity and enlist his sympathy, which can only be done by a good system of general education. Without it our best endeavours are bound to fail. Government has established Agricultural Colleges and model farms in different parts of the country, but Agriculture has been but little improved in consequence. Partly, I think, this is due to the vastness of the area and the great variety of local conditions, for each district has its own difficulties to meet and overcome. But the main reason for the failure is, I believe, the indifference and apathy of the people themselves. Another reason is the fact that these measures have come from outside and not from the people. However imperfect our education may be it is equally lamentable that it has so far affected no more than 5 per cent. of the population of the country. Before any noticeable change can take place there must be a general feeling among the people that improvement must be made and a desire to take advantage of the efforts of Government to help them. At present, they are more inclined to laugh at our attempts to aid them than to help us by their advice and showing us where their real difficulties lie. Their criticism, as a rule, is more destructive than educative.

I have found it possible to do something to improve the more intelligent ryots, to show them better methods of cultivation; and the school for the Dhankas at Songad has been more or less successful. But these measures only serve to raise the internal level of the lower agriculture up to the highest of our present system, while the problem is to raise the general level.

Perhaps something might be done by agricultural associations which studied local requirements and popularised such improvements as admitted of practical application. But I believe the only change which would do much, would be to induce a more intelligent and enterprising class to engage in agriculture.

Over and above all this, it is very important that our agriculturists should have cottage industries or some work on which they can usefully engage themselves and the members of their family during the slack season of agriculture. Such would be wood-carving and the making of toys for the men, and for the women, needle work and embroidery.

MANUFACTURES.

I do not think we should stop short at improving out raw materials, I believe we might do much in the way of working them up. The annual review of the Trade of India published by the Statistical Department of the Government of India teaches us some wholesome lessons, which it would be always useful to remember. They show the large number of objects for which we are at present dependent on foreign factories, but for which we have plenty of raw material at hand, and which, if we only avail ourselves of the latest scientific methods, we can ourselves manufacture. Our endeavour should be to reduce this dependence upon foreign industries and, where the necessary facilities do not exist for such manufactures at home, we should so improve the quality of our raw material as to enable it to hold its own in the foreign market to which it is sent out. The wheat, for instance, which we export at present, is used for the manufacture of bread in Europe, but it is scarcely fit to be turned to the many other uses to which it can be put, unless it is much improved in quality. The same remarks apply to many of the most ordinary articles of daily use, such as paper, oils, leather, etc. The case of leather is peculiarly striking. We export the hides, and the materials for tanning them and that is not all. There is a cheaper and more efficient process of cleaning the hides in use in Europe and the hides are exported to be cleaned there. Is it impossible for India to tan her own hides, in her own factories, with her own tanning materials? Another point seems inconceivable when the need for artificial manure is remembered and that is, that we export bones in large quantities to be turned into bone-manure for the beet-fields of our rivals, and so for their sugar, which we so largely import.

Glass again is an article of which we import a large quantity every year, but which we might manufacture for ourselves. Last year we imported glass of the value of over ninety lacs of Rupees. In 1887, I made some inquiries into the matter and found that there were raw materials in plenty for the manufacture not only of rough glass, but of glass of the finest quality. I was advised that it would not pay to establish a factory, but the reasons against success were not insuperable.

I also made some enquiries into the possibility of manufacturing paper in Guzerat and discovered that there were abundant raw materials of an excellent quality to be obtained here, and that this too was quite feasible.

We have already some glass-blowing factories at Kapadwanj and in the Punjab; Paper Mills in

Bombay, Poona and Bengal; Leather Tanneries in Madras, Cawnpore and Bombay; and it would be interesting to study the quantity and quality of these home products and compare them with the articles imported from abroad. We may thereby learn the difference and know how to remove their shortcomings and extend their sale. Experience is the only path to knowledge; comparison perfects it; it is the spirit of the age and the basis of all reform. I would suggest that, of the many manufactures which might be successful in India, it would be advisable to begin with those in which there is a steady local demand such as soap, candles, glass furniture, nibs, carpets, etc., and afterwards extend the field of our operations so as to include other and more elaborate articles.

INDUSTRIAL EDUCATION.

To enable us to take up these manufactures we need a system of Industrial Education, and for this we have to rely very largely on the assistance of Government. But we must remember that our position is not quite that of any European country in this respect, and that our best model would probably be Japan. Now Japan, when she aimed at general and, particularly, at industrial progress, adopted three main lines on which her education, was to run. These were, first to send a number of her young men abroad, and especially to Germany, for education; secondly, to establish great Colleges in Japan itself, the staff of which was at first composed of Europeans, and thirdly, to employ the services of Europeans, in the initial stages of her manufactures, under whom her people were gradually trained in efficiency.

Now I should like to call attention to the last of these first, because I think that here we have the solution of a difficulty which has been met with in the case of some industries which have recently been started. I have heard complaints that the quality of the goods turned out was not satisfactory and from what I heard, it seemed to me that perhaps the failure was due to the incompetency of the directors or to some culpable laxness in their management, or to our having commenced the enterprise on too impracticable or ambitious a scale or to our having lost sight of some essential conditions of success at the outset. Some industries may require European skill and supervision to pilot them through their initial stages, and a hasty attempt to dispense with it may lead to disappointing results. But there is another aspect to this apparent incompetency; we have to learn trustworthiness, a capacity for obedience, the art of management, accuracy, punctuality, method and the sense of justice, and the work-school which

will teach us these is a position in which they are called out by use.

To come to the second point, it is obviously impossible to send any very large proportion of our Indian youths abroad, though I think more might be done in this direction. I would appeal to Government and to our philanthropists to see if they cannot help us.

That which will help us most, however, is a largely extended system of technical and general education such as that on which Germany has built her commercial greatness. It is of course, impossible to imitate the German system exactly. But it is not impossible to provide ourselves with a system which will meet our requirements. Though private individuals may do something in the matter, a satisfactory solution of the whole question must depend upon the sympathy and generosity of the Government.

I believe that Government could not give a greater boon than such an education, and I think, I am voicing the feelings of the educated class at large, when I say that we are confident that we have not long to wait to see our rulers grapple with this problem, with their usual energy and decision. Meanwhile we must start our factories, as best we can, and do the best with our present circumstances. I do not over-look the fact that the odds against us are heavy and that our infant industries have to straggle from the start in an open market with long established competitors.

PROTECTION.

I am not afraid of being thought an economic heretic if I say that I think we need Protection to enable our industries to reach their growth. The economic history of Germany and America shows that there is a stage in the growth of a nation when protection is necessary.

The laws of Political Economy are not inexorable and must bend to the exigencies of time and place. Theories and doctrines, however plausible, cannot take precedence of plain and practical truths. It is true that Free Trade enables a country to procure at cheaper rates those articles that can be manufactured more conveniently in foreign lands, but this cheapness is dearly bought by the loss of industrial status, and the reduction of a whole people to a helpless proletariat. National defence against alien industrial inroads is more important than the cheapness of a few articles.

Protection, therefore if only for a short time, is what we need for our nascent manufactures; for some time must elapse before more perfect methods are naturalised in India and the standard of Indian workmanship attains the excellence of Europe. A high wall of tariffs has secured to American

manufactories the home market as an undisputed field for their own development and India, maimed and helpless as she has been, may expect that relief from her beneficent Government. Government, like the climate and geographical conditions of a country, has a peculiar force of its own and must leave an indelible impress on the mould of the destinies of nations. It may, as powerfully hamper, as promote the moral and material development of the people entrusted to its care. If the Government was backed up by a more informed and intelligent public opinion and if the people, awakened to a sense of national life were allowed and induced to take a livelier interest in their own concerns and if they worked in unison they would conduce to mutual strength. Government is a matter of common sense and compromise and its aim should be to secure the legitimate interests of the people governed.

HANDICRAFTS AND HOME INDUSTRIES.

But at the same time I would warn you against some false methods of encouraging Industry, such as the movement to use no cloth not produced in the country. The idea is quite unsound so far as any economic results go; and the true remedy for any old industry which needs support is to study the market, find out what is wanted and improve the finish of the work and the design, until an increasing demand shows that the right direction has been found. This applies particularly to the artistic trades such as wood-carving and metal-work for which the country has been so famous and which it would be a pity to allow to die altogether. Among other means of improvement, the education of women in decorative art would bring a fresh economic force into play; and as I ascertained by enquiries in London, made from a desire to find lucrative home-industries for our women, and especially for widows, would prove extremely profitable, if the right steps were taken. Tapestry for instance, is a great women's industry in Switzerland; lace work, cretonne and embroidered cushions could all very well be done by women. Needle work is even now done in Guzerat homes. If the designs and colouring are improved it might be turned into an active industry, supplying our own wants and possibly, outside demands. Carpet weaving also which is now done in several of our jails, might in the same way be turned into a profitable home industry. The main thing is to study the market and not to pursue our own hobbies. It would be necessary to have agents in Europe, who would study European wants, consult professional men and get designs which could be executed in India. Something of the sort is, I believe, done in the School of Arts in Madras. My inquiries in Paris convinced me that in the

hands of capable persons this method would be both practicable and profitable.

LARGE INDUSTRIES.

I would, however, direct your attention more to the establishment of the larger industries involving an extensive use of machinery, for it is upon this that our economic future and any increase of our wealth depends.

Before we have a large demand at home for the Arts we must produce the wealth to support them and we shall never have that wealth, until we have an economic system on a much broader basis than our present limited Industry.

With a little energy and the assistance of Government we can broaden this basis and then we may look forward to a new lease of life for Indian Art and Indian Literature and for those industries which depend on leisure and wealth.

Now I should like to say a few words on the subject of the assistance which a Government can give in developing the resources of its territories. I have indicated a few ways in which I think Government can help economic development in the direction of Education. To these I would add improvement in the means of communication and the establishment of banks and other co-operative institutions. It can also encourage merchants and manufacturers by advances of capital and by granting other facilities.

Native States in India seriously handicapped as they are by their limited means and scope and the want of trained men, though they cannot emulate their great exemplar, the British Government, seem to limit themselves as yet too much to the routine of administration and might do more for the material and commercial development of the country. Granted freedom of action, and with proper endeavours, I am inclined to think that many States in Central India, Rajaputana and elsewhere would be able to get even more treasure out of the bowels of the earth than Mysore and Hyderabad at present obtain. But Government help has its limits.

My experience teaches me that it is very difficult for Government to provide industries for its people in the absence of a real business spirit amongst the people themselves. It is very difficult for so impersonal an entity as Government to get capable managers or to supervise its enterprises properly. I have tried various measures in my own State but I am sorry to say that the results are disappointing. A sugar-mill, a cotton-mill and an ice-factory were tried but were not a success. A State fund for the advance of capital and other assistance to manufacturers also failed. I found that the managers were not sufficiently interested in the scheme and not impartial in the working of

it. I am convinced, however, that the fault lay not with the industries themselves but in the fact that they were State-enterprises.

I have also made an experiment in technical education. I founded an institution called the Kala-Bhavan with departments in dyeing and weaving, carpentry and mechanical engineering, and with the object of diffusing technical education. I had branches of it set up in various parts of the Raj; but the response among the people was so faint that after a time the institution had to be contracted within narrower limits. Until the means of the people and the material wealth of the country expand, there can be but little demand for the work which such institutes turn out. So far, the Kala-Bhavan has done but little beyond providing skilled dyers for Bombay mills; but until the people co-operate more earnestly its utility will not be recognised. Once more it is the prevailing ignorance which hampers every movement to help the people. They are sunk in a fatalistic apathy and do not care to learn how to help themselves.

I have omitted to refer to the many endeavours made by other Native States in the same direction not because they are not worth mentioning; the wonderful Cauvery electric power scheme and the Irrigation projects of the Mysore and Jeypore States as well as the fine Technical School at Jeypore are indisputably entitled to a high rank in the record of such laudable work; I have to pass them over for want of time and adequate information of all their details.

EFFECT OF EDUCATION ON INDUSTRIAL EFFICIENCY.

It is the general lack of education and intelligence which hampers us at every turn and has been our ruin. Once we can make education general we may hope for increased dexterity, an increased trustworthiness and quickness to discover new processes. We need these qualities in every class of Indian society. Education in England has diffused a spirit of self-reliance and a capacity for initiative education in Germany aims at thorough knowledge, methodical application and exact learning; but education in India has hitherto aimed only at providing a certain amount of food for thought without ever touching the mental capacity or character.

CAPITAL.

I do not think that the plea that our industries are poor for want of capital is one that can be sustained. We have more capital than we imagine to develop our resources if we would only use it. But we lack the active foresight always seeking the best investments. We prefer to hoard our savings in our women's ornaments, or to invest it

in Government securities at low rates of interest when we might be using it in ways which would be profitable to the country at large, as well as to ourselves, such as agricultural improvements, insurance of agricultural stock and the establishment of factories. And this is especially true of some Native States, which invest their surplus capital in Government securities instead of using it in the development of the resources of their own territories.

WANT OF SELF-CONFIDENCE AND CONFIDENCE IN OTHERS.

This is not, however, our only fault. There is another fault which is nearly as fatal to any system of industry and that is our lack of confidence in ourselves and in one another. Without self-confidence you can never do anything; you will never found an industry or build up a trade, for you have nothing to carry you through the first anxious years when the only dividend is Hope, and the best assets are unfaltering courage and faith in oneself. And without confidence in one another you will never have a credit system and without a credit system no modern commerce can exist. It is this want of co-operation and mutual distrust which paralyses Indian industry, ruins the statesman, and discredits the individual even in his own household. I believe that this trait of our character, though in some case arising from our obvious defects and instances of actual misconduct among ourselves, is mainly due to the fact that the nation has long been split up into incoherent units, but also to the ignorance and restricted vision which result from our own exclusiveness. We have denied ourselves the illuminating experience of foreign travel and are too prone to imagine that our weaknesses are confined to India. Failures and defalcations are as common in Europe, as among ourselves; and yet we allow ourselves to be too easily discouraged by such incidents. Hence arises a habit of censorious judgment, a disposition to put the worst construction on the conduct of our friends and relatives without trying to find the truth, which destroys all trust and tolerance. Our view of the conduct of friends, of the policy of administrations, of the success and integrity of commercial undertakings, are all vitiated by a readiness to believe the worst. It is only when we learn to suspend judgment and know the man and the motive before we criticise, that we shall be able to repose trust where trust is due. We must stiffen our character and educate ourselves up to a higher moral standard.

We despair too easily. Let us remember that we must expect failures at first; but that it is those who learn from failure that succeed.

Moreover as any one may learn from a survey of the present state of Industry, there is evidence that some do succeed. We have not, of course, made the most of our opportunities, but it is worth while remembering that something has been done because it shows us what it is possible to do, and encourage us to do it. If any one wishes to know, in more detail, what has been done and what might be done, he could not do better and consult Mr. Ranade's excellent book on the subject.

EXHIBITIONS.

And now let me say a word about this Exhibition and its aims. I take it that an Exhibition is intended to draw together the scattered threads of industrial activity, so that the members of any trade may learn not only what is the latest development in their own trade, but also what other trades are doing, and what in the other trades is likely to help them. Then it is hoped the spectacle of advance and improvement will arouse emulation and suggest new ideas and also draw industries together. But are the conditions in India such that we may hope for this? I fear not; I fear that the ryot will not come to learn from us and that there will be few craftsmen who will go away with new ideas and the memory of new processes. But we should not despair.

It should be remembered that a similar difficulty was experienced in England in connection with the workmen's institutes which sprang up all over the country in response to Dr. Birkbeck Hill's suggestions. The object was to provide the mechanic with lectures on his own trade; but the attempt failed from the incapacity of the working man to learn anything from the lectures. Lectures and Exhibitions bear fruit only when the people have received sufficient general education to make them mentally receptive and deft in adaptation and invention. When that goal is reached, such Exhibitions may most usefully be turned into Local Museums and if possible a syllabus of instruction attached to the exhibits. On the other hand there is yet another function which Exhibitions perform and which is equally useful and that is their influence as general education among the classes whose intelligence is already aroused, and who go away with a new sense of what there is to learn. Life is not yet all machinery which it takes an expert to understand and there are many new ideas which the collection of the most recent, efforts in Art and Science in one place can inspire and especially is this true, if there is the comparison of the old and the new.

AWAKENING.

But before any of these undertakings and enterprises, which I have mentioned can succeed, India

must be thoroughly awakened. Understand what this means. *It means action.* There is no reality in our social reform, our political progress, our industrial revival, because, as you know, there is scarcely one who dares to act even in his own household.

You complain of an over centralised Government, of the evils of heavy home charges, of Inland Excise duties on cotton, of the treatment given to your emigrants, and the want of a legitimate share by the people in their own Government, and there may be much in your complaints, but until you realise that the ultimate remedy lies in your own hands and that you have to carry it out by yourselves, no external reform can help you.

That awakening, that realisation is your share of the work, you who know something of Western thought and Western methods, and who imitate much from the West. But to the bulk of the population it does not apply so simply. The masses of India are lost in a hopeless ignorance and that is why they are so intensely conservative and lacking in confidence and initiative. We cling to old customs because we do not know that they are not essential to our religion and we dare not adopt new ideas or establish new industries because we do not know how to set about it. But there is another side to this ignorance and that is that we let our old customs hamper us and blind us to the present, because we do not understand the past.

Remember two inevitable tendencies in history, one, that no system however perfect, however glorious, however far reaching, can go on for two thousand years (or two hundred for that matter) without enormous changes being made in it simply by Time; the other that the Religious, the Political and Mental elements of a nation are indissolubly connected and interwoven so that you cannot alter a single feature in one of them without changing all three. Now apply these principles to the past.

THE PAST.

From 500 A. D. we find a steady decline in the political and mental condition of the country down to the two centuries of darkness from which we emerge into the periods of Rajput and the Mohammedan conquest. Follow the fortunes of India down the next eight centuries and note the steady decline in Hindu power both political and mental, till we come to the time when Europeans obtain a firm footing in India and conquer the country with very slender means, meeting and conquering each problem as it arises. For fourteen hundred years the record is one of steady decline in political and mental nationality. How then can religion

have fared and especially all those social institutions, which depend on Religion?

Surely it is clear that just as our trade and our political power collapsed before the attacks made upon them because they were inefficient, the other features of our system cannot have escaped degradation and that in clinging to them blindly we are clinging to the very tendencies, the very forces that have dragged us down.

The fact that we cling so tightly to them has only ruined them and us. Consider the effects of cumulative physical heredity on the capacity of any caste when the action, for which that caste and its institutions were designed, is taken out of its power.

Here then is the problem to carry out a great change in this respect, to realise our ignorance and to make up our minds to face the question, how and what to change boldly and all together. We have changed before when it has suited our convenience, adopting details from the Mahomedans when it fell in with our wishes and many of us, even our Conservatives, are European in their tastes at times.

It is obvious that our Religion and Institutions of to-day have nothing in them except perhaps a faint shadow of their old vigour and glory on which our old greatness was founded.

India needs a great national movement in which each man will work for the nation and not for himself or for his caste, a movement carried out on common sense lines.

It does not mean that we are to adopt a brand new system from Europe, but it does mean that we must borrow a little common sense in our solutions of the problems of life.

We must resolutely see what we need and if we find a plain and satisfactory solution adopt it whether we have authority for it or not. Turn to the past and see what made India great and if you find anything in our present customs which does not square with what we find there, make up your minds to get rid of it boldly, without thinking that it will ruin you to do so. Study the past till you know what knowledge you can get from it which you can use in the present and add to it what the West can teach us especially in the application of Science to the needs of life.

You, gentlemen, are the leaders of India and if you fail, she fails. Let each of you make up his mind that he will live by what his reason tells him is right, no matter whether it be opposed or approved by any sage, custom or tradition. Think and then act at once. Enough time has been wasted, waiting for Time to solve

our problems. Wait no longer but strike and strike home.

We have our "ancient regime" of custom and prejudice to overcome; let us meet them by a new Liberty, Equality and Fraternity, a Liberty of action, Equality of opportunity and the Fraternity of a great national ideal. Then you may hope to see India a nation again, with a national Art and a national literature and a flourishing commerce, and then, but not till then may you demand a National Government.

I should like to pay a personal tribute to the organisers of this Exhibition, for the trouble and energy they have expended in making this collection of Indian Arts and Industry—so fine and representative a collection, and to the local authorities and their able head, Mr. Lely, the popular Commissioner, whose name will ever be a household word in Guzerat for his unfailing kindness in Famine and plenty and who has taken so encouraging an interest in this Exhibition.

Surely it is a good omen for the success of our industrial revival that this Exhibition takes place in Ahmedabad, a town long famous for its enterprise and energy and which already possesses factories and industrial connections of importance with the industrial world. If only we had a few more Ahmedabads, India would not have long to wait for a real revival of her commerce.

And last of all, I have to pray for the long life, happiness and prosperity of his Gracious Majesty the King Emperor, whose accession we are about to celebrate in so splendid a manner and whose reign will, we trust, inaugurate a new period of strong and prosperous national life for India, which will make her the brightest jewel in that Imperial Diadem.

LAND PROBLEMS IN INDIA.

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The World of Books.

EDUCATION AND EMPIRE.—*Addresses on Certain Topics of the Day; by Richard Burdon Haldane, M.P., LL.D., K. C.* London: John Murray: 1902.

The addresses contained in this volume were delivered to audiences of very different natures. They are therefore somewhat heterogeneous in character, and indeed, the letters that follow Mr. Haldane's name on the title page give a better clue to their nature than the title itself. Mr. Haldane was a distinguished student of philosophy, and he is now an eminent King's Counsel, and a prominent member of that branch of the Liberal party which calls itself Imperialist. In the first two addresses the subjects of which are "Great Britain and Germany: a Study in Education," and "Universities and the Schools in Scotland," Mr. Haldane speaks as a statesman who is an educational reformer and who sees the injury done to the Empire by the many blemishes in the present system of education in Great Britain. In the third and fourth addresses on "Federal Constitutions within the Empire" and "the Appellate Courts of the Empire" it is Mr. Haldane the lawyer and the imperialist who is specially prominent, while in the address on "Science and Religion" which completes the volume, it is Mr. Haldane the philosopher who throws his influence into the scale against materialism. The Empire is the connecting link between the first four, and even the fifth may be regarded as remotely related, for, as Mr. Haldane says, it is in substance a plea for tolerance, and "in view of the fact that the majority of our fellow subjects in the Empire are of different religions to our own, a wide outlook among those who rule is needed here as elsewhere." In the addresses that deal with Education, Mr. Haldane has given vigorous expression to the view that the present system of education in Great Britain must be thoroughly reformed if our country is to keep its foremost place among the nations. In his first address which was delivered at Liverpool he held up to some of the leading citizens of that great commercial city the example of what Germany has done for her commerce by the attention she has paid to education. Germany is not fond of spending money, but she has found the money she has spent on education a most profitable investment. Her Universities are equipped with a staff large enough to admit of specialisation, and no expense is grudged in the matter of equipment, and side by side with her Universities are her great technical schools where the highest

knowledge is applied to technical enterprise. This development of Education in Germany is due to the fact that the people are interested in education, and in Great Britain, Mr. Haldane maintains, there is seriously wanting "a much more enlightened intelligence on the part of the public with regard to education." To arouse an interest in education, education has to be made interesting, and one of the most important ways of doing that, is to improve elementary education. "The great problem of to-day is the welding of the educational system of this country into one complete whole, in which elementary education, secondary education and the University shall all be indissoluble parts of the same system." This last point is specially emphasised in the second address which was delivered to a Congress of Scottish teachers. Elementary education cannot but suffer, so long as it is regarded as something by itself out of all relation with the higher intellectual life of the country. The problem of education is, he holds, the question of the hour. "In this problem of education lies our future; * * on it depends our position as the leading commercial nation of the world, aye, and as the empire."

In the addresses which deal with constitutional law Mr. Haldane speaks both as a lawyer and as a statesman. In the first of them which was delivered in 1900 at the Colonial Institute upon the Australian delegates he examines "the working of the unwritten and developing British Constitution as this has been reproduced in Canada and Australia," and points out how "the Imperial Parliament is coming to recognise itself as trustee of its supreme powers for the Empire as a whole." The fourth address is really a plea for the establishment of a supreme Court of Appeal for all our colonies and dependencies. At present appellate jurisdiction is exercised by the Judicial Committee of the Privy Council and by the House of Lords. Mr. Haldane would have this jurisdiction transferred to a supreme tribunal for the Empire. In that case eminent colonial and Indian judges would be appointed as life peers, and their presence in the House of Lords not only would be valuable in itself, but might be "the precursor of further changes in the constitution of that House." Such a tribunal, would in Mr. Haldane's opinion, "be a real step towards the only kind of imperial federation which seems possible."

In the course of these two addresses Mr. Haldane refers to a case of great interest connected with the Channel Islands in which he was engaged. It is curious to learn then, in the year 1894 the question was debated upon a special committee of the Privy Council, whether the Queen as

Duchess of Normandy is an absolute or a constitutional monarch in Jersey and the other Channel Islands. It is also curious to learn that while the constitutional question was nominally left open, the Queen in Council decided that an order passed by the Queen in Council should be quashed as a breach of an understanding come to between the Government of Lord Melbourne and the authorities of Jersey fifty years before.

The last address is, as has been indicated, philosophical rather than political or legal in its nature, and many readers in this country may find it the most interesting in the volume. The problem Mr. Haldane deals with, is the fact that in spite of the advances of the material sciences during the last quarter of a century "religion remains a power as great and as living as at any time in the world's history." "Religion as distinguished from theology, that belief in the highest standpoints which has been the faith of the men and women who in all ages have been regarded as greatest and wisest, this remains undiminished in its hold on the heart." This it does, in spite of the fact that much of what is sometimes put forward as science is essentially materialistic in character. Mr. Haldane's attempt to solve the problem is made along the lines of idealism. Once grant that matter and energy are the only two ultimate realities and the position is abandoned to materialism. But science itself teaches us that if there were no percipient mind "our final universe of matter and energy would then be unlike anything we or even men of science, have any experience of." Matter and energy "exist only for brains that perceive and they cannot be the finally real things." But the brain which perceives is itself "only a projection of a mind that perceives." The conclusion science is driven to, "is not that things produce mind but that mind produces things." On the other hand we know we do not make the world. "The evolutionary account of the universe is a true account, given from a limited standpoint of one aspect, but of one aspect only." All other aspects must be regarded as equally real with those of biology and physics. "Beauty is as real as biology and morality as mathematics." "In truth and in fact our common science bids us recognise the higher aspects as not less real, and indeed as taking up those that are lowest, into themselves." Mr. Haldane therefore considers that, properly regarded, there is no conflict between religion and science.

From the account we have given of Mr. Haldane's addresses it will be seen that they are instructive and stimulating. They are of more than merely passing interest and were quite worthy of being published in a more permanent form.

THOMAS HENRY HUXLEY, by Edward Clodd. William Blackwood and Sons.

In this handy volume of 220 pages, Mr. Edward Clodd has said all that is interesting, instructive and ennobling in the life and teachings of Professor Huxley.

The chapter in the book which will most interest the general reader is the first which treats of Huxley as the man and our interest in the career of Huxley is greatly roused when we are told that Huxley was born of poor parentage and that his boyhood was cheerless time.

No "rigorous teachers seized his youth,
And purged his faith, and tried its fire,
Shewed him the high, white star of truth,
There bade him gaze, and there aspire."

We have it from Huxley himself that "he was kicked into the world a boy without guide or training or with worse than none" and contrasting Herbert Spencer's happier lot, he says, he had "two years of a Pandemonium of a School (between eight and ten) and after that neither help nor sympathy in any intellectual direction till he reached manhood." But Huxley was early possessed of that love of reading which in Gibbon's famous words he "would not have changed for the treasures of India." Hutton's *Geology*, Hamilton's essay on the *Philosophy of the Unconditioned*, Carlyle's *Sartor Resartus* and Lessing's writings; these were some of his early readings in literature. His early bent was towards mechanical engineering but though this was his hobby, medicine, at the start, was his destiny. At the age of sixteen family circumstances forced Huxley to accept a place as assistant to a Dr. Chandler as a preliminary to "walking the hospitals."

But Huxley had soon to leave him. He was apprenticed to his brother-in-law and began study for the Matriculation examination of the University of London. He failed in this, but compensation soon came when he and his brother won free scholarships in the Medical School of Charing Cross Hospital. In 1845 he passed his M. B. at the University of London and made his first discovery, a then unknown membrane at the root of the human hair afterwards known as "Huxley's layer." But not even this discovery brought Huxley any position which would give him any decent competence. After several unsuccessful attempts there came for him "a turn of the tide which, not without ebb, led on to fortune."

Owen Stanley, son of the Bishop of Norwich and brother of Dean Stanley, was in command of

the *Rattlesnake*, a 28-gun frigate commissioned to survey the intricate passages within the barrier-reef skirting the eastern shores of Australia, between which colony and the mother country a shorter sea-passage was demanded by the growing trade. Captain Stanley wanted an assistant-surgeon, and on the recommendation of Sir John Richardson, the famous Arctic explorer, Huxley was given the post.

During the voyage which occupied over three years Huxley made the best use of his opportunities and contributed sundry reports on marine creatures to the Linnean Society, and though many of them were pigeon-holed, better fortune attended a paper on the Medusæ or Jelly-fish family transmitted to the Royal Society through Bishop Stanley. The paper was soon published and Huxley entered on the threshold of his famous career at the early age of 26 by being elected as a member of that distinguished body. But the election to the Royal Society did not bring him any addition to his pocket which was the thing which he needed most at that time and he had to pass five years of "suspense and struggle" before he secured a permanent appointment of £200 per annum—one-half of the modest maximum he desired. It is interesting to read about the attitude of mind which Huxley had at this period of his life. He writes to his sister:—

I have no ambition, except as a means to an end and that end is the possession of a sufficient income to many.

A worker I must always be—it is my nature—but if, I had £400 a year, I would never let my name appear to anything I did or ever shall do. It would be glorious to be a voice working in secret and free from all those personal motives that have actuated the best.

And again:

I don't know and I don't care whether I shall ever be what is called a great man. I will leave my mark somewhere and it shall be clear and distinct.

T. H. H. HIS MARK.—

And free from the abominable blur of cant, humbug, and self-seeking, which surrounds everything in this present world, that is to say, supposing that I am not already unconsciously tainted myself, a result of which I have a morbid dread.

His great ideal was the genuine love of truth. In that allegiance Huxley never wavered:—

If wife and child and name and fame were all lost to me one after another, still I would not lie.....The longer I live the more obvious it is to me that the most sacred act of a man's life is to say and to feel, "I believe such and such to be true." All the greatest rewards and all the heaviest penalties of existence cling about that act. The universe is one and the same throughout; and if the condition of my success in

unravelling some little difficulty of anatomy or physiology is, that I shall rigorously refuse to put faith in that which does not rest on sufficient evidence, I cannot believe that the great mysteries of existence will be laid open to me on other terms.

"Veracity is the heart of morality"; thus Huxley summed up the whole matter in his Rectorial Address to the students of Aberdeen University. To the last day of his death he faithfully kept up to his ideal.

We have unfortunately no space to follow in detail Huxley's career as a discoverer, as an interpreter, as a controversialist and as a constructor.

Dr. Clodd takes exception to the opinion of of some critics that Huxley was only a "populariser" but proves on the other hand the enormous original work done by Huxley to mention the field of Biology alone.

The account given of Huxley as a controversialist will afford interesting reading. Huxley never courted controversy but when he was dragged into it he never spared his opponent.

In winding up his interesting account of Huxley Dr. Clodd observes:

"Those who knew him best loved him most, and none came into touch with his eager sympathetic, breezy, and altogether beautiful nature without receiving an impulse to higher aims. Of spotless integrity in every relation, and single-minded in every purpose, he went on from strength to strength, because each step made the rightness of the path which he had chosen more manifest. One "who never turned his back, but marched breast-forward"; unswayed by motives of worldly prudence; undeterred by authority which could produce no valid warrant of its claims; governed by "morality touched by emotion" and guided by reason within limits which none have defined so well—he remains alike an example and an inspiration to all men for all time."

Thus Mr. Clodd sums up Huxley's work.

"To regard Huxley as a compound of Bonnages and Iconoclast is to show entire misapprehension of the aims which inspired his labours. In Biology his discovery of the structure of the Medusæ laid the foundation of modern Zoology; his theory of the origin of the skull gave a firm basis to vertebrate morphology; and his luminous exposition of the pedigree of man imposed order where confusion had reigned. In the more important matter of Education he formulated principles whose adoption would bring out the best that is in every scholar, and inspire him with love of whatever 'is of good report' while his invention of the laboratory system of zoological teaching has been adopted with the best results in every school and university of repute. In Theology he separated the accidental elements from the essential, leaving as residuum a religion that, co-ordinated with the needs and aspirations of human nature would find its highest motive and its permanency in an ethic based on sympathy."

NOBLE LIVING *being Essays on Religious and Moral Subjects compiled by Parupudi Venkata Seshagiri Rao. (G. A. Natesan & Co., Esplanade, Madras. Price Rs 1-4-0.)*

Charles Lamb said that he could read anything that he called a book, Shaftesbury was not too genteel for him nor Jonathan Wild too low. Mr. Seshagiri Rao shares this catholicity of taste. He has collected in this book, things new and old, good, bad and indifferent and seems to regard as equally authoritative Ruskin and Mr. Voysey, Thomas a Kempis and Theodore Parker, Emerson and anonymous contributors to the Christian Register. One could wish that he had not indicated the source of any of his selections as his readers would then have been provided with an interesting exercise in literary discrimination.

Whether morality is to be thus taught in snippets we do not venture to say. There are in Mr. Seshagiri Rao's book a good many excellent pieces but unfortunately there is also a good deal of rubbish that might have been left in the obscurity of the periodicals in which it first appeared. Moreover the diversity of his sources makes it impossible that any system of morals should form itself in the mind as a result of studying "Noble Living." These defects will, we fear, prevent Mr. Seshagiri Rao's book supplying "the need long felt in Schools and Colleges for a moral Text Book that will be acceptable to all who feel that the true aim of education is the development of character as well as the training of the intellect."

Messrs. G. A. Natesan & Co., are to be congratulated on the way in which they have printed and bound the book. We have noticed some misprints however.

THE ROSE READER, *by Edward Rose. Methuen & Co., London. 1902.*

Mr. Rose says that his book is "a new way of teaching to read," and he begins his prefatory remarks by saying that to teach a child to read in English is an exceedingly difficult thing. His various expedients for surmounting the difficulty are rationally conceived and well worked out. Perhaps the best is the plan of confining the vocabulary of the first half of the book to words spelt phonetically of which there are after all a large number in English. As is only proper, the subject matter is taken from the ordinary incidents of child life in England and therefore the book would not probably be found very useful in Indian Schools though teachers might learn much from it. It is beautifully printed and illustrated, many of the pictures being in colours.

THE ECONOMY OF HUMAN LIFE. *Luzac & Co., London*

This is a translation of an Indian manuscript written by an ancient Brahmin. An account of the manner in which this manuscript was discovered is given in a letter from an English gentleman then residing in China to the Earl of Chesterfield which is prefixed to the book. The manuscript was discovered in Lassa, translated by an unknown author, and made its first appearance in 1751. The book seems to have had a ready sale and attained its fiftieth edition by the year 1812. Then it dropped out of notice. It has been translated into French, German, Italian and Welsh; it has been paraphrased in verse, and illustrated in various styles by distinguished artists. "A book with such a record deserves to live; and in the hope that interest in it may revive this new edition is now prepared."

What especially marks the work is its sanity. Simple, exact, concise, virile, its rules of life are distinguished more particularly by the moderation with which they are expressed.

A galaxy of jewels of the mind, in some cases polished to the utmost brilliancy, they excite our admiration not only by reason of their separate intrinsic worth, but on account of their relative perfection, forming as they do particles in a beautiful mosaic of thought.

Mr. Douglas Gane who writes a brief but telling preface very rightly observes:

In our age, when so much is sacrificed to a depraved utilitarianism, we need such books as this to remind us of what is true and wholesome in life, and to lay bare to our view the springs of health. The complexity of modern times tends to hide from us the plain truth of nature, until we have come to find in the simplicity of a question the chief cause of its obscurity.

"LAVINIA" *by Rhoda Broughton: Macmillan's Colonial Library.*

"Lavinia" is a study in contrasted types of manhood seen through a woman's eyes. Sir George Campion is the father of two sons, and the uncle of the orphan, Lavinia. One son has been killed in South Africa. The other, Rupert, who has always been betrothed to Lavinia, is wholly uncongenial to his rough, fierce old father; he is a man of letters, with an aversion to all forms of violence. Lavinia acts as a buffer between the two, but when at last they are reconciled in a common desire for her marriage with Rupert, she meets a man of wholly different type, Captain Binning, the wounded soldier in saving whom the other brother has been killed. And between the two love springs up irresistibly, in spite of the barriers felt by them both. The book is occupied in working through the complications thus generated to a happy conclusion only reached after much suffering.

• **CECILIA** by *F. Marion Crawford*: *A story of Modern Rome. Macmillan's Colonial Library.*

In his latest novel, Mr. Crawford has returned to Rome, the scene of some of his most famous works—*Saracinesca*, *Don Orsino*, and *Sant' Ilario*.

The story plays round the life and adventures of "Cecilia, the last of the Vestals." There is a mysterious connection between the lives of Cecilia and the heroine of the book—a young woman of modern Rome—which is worked out in the course of this remarkable novel with Mr. Crawford's accustomed skill.

HEATH'S PRACTICAL FRENCH GRAMMAR, by *W. H. Fraser, B.A., and J. Squair, B.A.*, (D. C. Heath & Co., London.)

This is both grammar and exercise book. The first part takes up the grammar of the language in outline and the second goes over the same ground in considerable detail. The grammatical explanations are clear and full and the exercises copious and well chosen. A pupil working conscientiously through the book should acquire a competent knowledge of French, particularly if his reading were preceded and accompanied by conversation lessons.

THE DIARY OF A GOOSE GIRL & A CATHEDRAL COURTSHIP, By *Kate D. Wiggin*—George Bell & Sons.

If to entertain the reading public is the object of this book the author has realised it most successfully. The entertainment provided for here, is not of the type, catered for by such books as "the Diary of a Bad Boy" or "of the Bashful man." The Goose-girl is a highly cultured lady who has escaped to a village—Thomey—croft-farm from the persistent addresses of an untiring lover—only to succumb sweetly at the end to the ways of marriage. Thomey croft-farm is a magnified poultry-yard and the goose-girl records the little epic of poultry-yard life—with its humour and sorrows. Despite a certain delicious humour that runs through the whole book, we fail to appreciate the taste that caters to a public such silly adventures of ducks and goslings.

The latter half of the book is occupied with a reprint of another story from the same pen—*A cathedral courtship*—published for the first time, many years ago. We need hardly say, that the same genial humour glows through these pages.

Books Received.

MACMILLAN & CO.

English Men of Letters Series.

(1) George Elliot by Leslie Stephen.

(2) Tennyson by Sir Alfred Lyall.

(3) Matthew Arnold by Herbert W. Paul.

(4) John Ruskin by Frederic Harrison.

Manual of Hygiene for Use in India by Charles Banks.

Lessons on the British Government of India and on the British Empire by Colin H. Browning.

Algebra for Beginners for Indian Schools by Todhunter and Loney.

J. M. DENT & Co.

Mazzini by Bolton King, M. A.

THE WALTER SCOTT PUBLISHING CO.

Tolstoy: His Life and Works by John Coleman Kenworthy.

A Budget of Anecdotes by George Seton.

Sin Chong: A celestial Apologue by W. Bramiston Jones.

The Story of Life by Ellice Hopkins.

Musicians, Wit, Humour and Anecdote by Frederick, J. Crowest.

W. R. CHAMBERS, LD.

Progress of India, Japan and China in the Century by Sir Richard Temple.

GEORGE NEWNES LD.

The story of the Empire by Edward Salmon.

Fenton's Quest by M. E. Braddon.

Tit-Bits Monster Penny Books.

(1) Robin Hood's Adventures.

(2) Wordsworth's Poems.

(3) Mrs. Hemans's Poems

GEORGE BELL & SONS.

The Lady of the Barge by W. W. Jacobs.

The House under the Sea by Max Pemberton.

A Londoner's Log Book.

JARROLD & SONS.

David Maxwell by W. J. Crossbie.

Distant Lamps by Jessie Reuss.

MACNIVEN AND WALLACE.

Yeshudas: A monograph by Annie H. Small.

P. S. KING AND SON.

Parliament: its Romance, its Comedy and its Pathos by Michael MacDonagh.

T. FISHER UNWIN.

The Memoirs of Paul Kruger.

INDIAN PRESS, ALAHABAD.

The Loyal Rajputana: a description of the services of the Rajputana princes to the British Government rendered during the Mutiny of 1857 by Munishi Jwala Sahai.

A. BROWNE AND SONS.

Elementary Geography and How to Teach it.

CHRISTIAN LITERATURE SOCIETY, MADRAS.

The Call of the Twentieth Century to Awakened India.

Topics from Periodicals.

THE TREATMENT OF NATIVES IN INDIA.

Mr. R. Sommerville Wood contributes to the latest number of the *Humane Review* an interesting paper on this subject.

He begins by observing that anyone who has lived for even a short time in India will be able to testify to the sad lack, I do not say of courtesy, but of ordinary humane treatment, that is so conspicuous by its absence in the relations existing between the European community and the natives of Hindustan.

One cannot, it is true, deny that things are far better than they were some 50 years ago. but this is saying very little, and the fact remains that a very considerable advance on the present condition of affairs is much to be desired. Though the English Sahib can no longer thrash a native servant on the least pretence, and if he does is liable to be prosecuted, yet the ordinary Englishman in India does in countless ways convey to his native dependents the impression that he regards them as the scum of creation, and the ordinary Englishwoman is rather worse than her husband or brother.

The natives of India are, like all Orientals, naturally polite and courteous to a degree that seems excessive and insincere to our blunter natures. Polite phrases do not always bear strict examination in a severe court of sincerity, and yet they add in an untold degree to the amenities of life. I shall never forget once in India on returning to my house after a fortnight's absence, asking my native cook how he was, to which he replied, "In your Honour's service how can I be otherwise than well?" Imagine an English cook making such a rejoinder!

What must a race so essentially polite think of the manners and the religion of the English race as they know it in India? "Dog," "Son of a pig," "Offspring of an Owl," and reflections on the virtue of their female relatives for many generations, besides epithets that are quite unprintable in the *Humane* or any other Review, are terms frequently applied to servants, and even to the educated Babus on any and every occasion; often out of mere wantonness, when no cause of offence has been given, and this not only by "the brutal planter," as that section of the community is most invidiously termed, but by men of supposed refinement and by women who consider that the word "gentle" should be prefixed to the term "woman" when allusion is made to them.

Then again most offensive is the custom of alluding to natives generally as "niggers" when they have no negro blood in them, and their complexions are not black, as the word would imply, but are of a light mahogany colour. I have alluded to the planters, a class I am well acquainted with, having lived among them on the most friendly terms for many years. They are no worse in their treatment of the natives than are the officers in the Army, the civil servants, the "padres," or the commercial community generally. The term "brutal" is a libel on the planters, if it means that they treat their native servants worse than other Europeans do; my experience is that they treat them rather better, as they are thrown perforce into closer relationship with them away on a lonely garden miles from any European station.

Here is a good word for the Planter.

The planters have their failings, as their critics have, but they have virtues that many would do well to emulate. They are generally hospitable, warm-hearted, generous to a fault, manly, self-reliant, cheerful under the most depressing conditions. Knowing them as I do, grateful for many acts of personal kindness, they will ever have a warm place in my heart; but their verbal intercourse with those working for them is not exactly polished and is far from being ideal.

The magistrates, too, with some notable exceptions of course (would that they were the rule not the exception!) are also most blameworthy for not setting a good example in this respect, and for not upholding the dignity of the governing race by illustrating the principle of *noblesse oblige*.

I wish to be perfectly fair in my strictures, and so must bear my testimony to the hard-working zeal displayed by the civil servants in India. They administer justice impartially to the best of their power, and as a rule do hold the scale of justice evenly balanced between European and native when a case comes before them, and have certainly in a great measure sternly repressed the ill-treatment of natives as far as physical ill-treatment goes. I am lost in admiration when I consider the marvellous way in which one man, often quite young, rules over a vast district and performs duties that would be discharged by at least a dozen different officials in Europe. Still they are not loved, nor can they expect to be, when their whole manner to the natives is offensive, rude, over-bearing, disdainful, and entirely devoid of sympathy.

I remember once meeting a native gentleman when I was out for an evening walk in the hills. I addressed him and soon found I was conversing with a scholar whose name is well-known in India and also in England and America. A religious reformer, a charming author, and an orator of no mean order, even when speaking in English, which was a foreign tongue to him, I invited him to lunch at my house and was proud to entertain him then and on many subsequent occasions. He told me that though he had been the guest of Max Muller at Oxford and had enjoyed the friendship of Matthew Arnold, he had never been invited to any European's house before in the hills, though he had been a guest at Government House in Calcutta. The state of things I allude to, this utter want of sympathy and ordinary politeness, is much to be deplored.

There are many encouraging signs to be seen, by the careful observer, of a more humane spirit abroad, even though war still raises its hideous head and a blatant militarism is epidemic in our midst.

May this spirit extend to India! The West has as much to learn from the East, as the East has from the West, and as the two races become better acquainted, and live together on friendly terms, mutual benefits will accrue to them both, and the speculative spirit of India, acting on the more materialistic ideas of England, and being itself re-acted upon, should produce in the course of the ages a higher humanity, a nobler manhood, a more perfect realization of the divinity that is potential within us, but which is so seldom manifested in action.

AN INDIGENOUS INDIAN UNIVERSITY.

From ancient times, Benares has been known as a centre of Sanskrit learning which attracted distinguished teachers and earnest students of Sanskrit Literature. Even to-day, the holiest city of the Hindus contains a large number of Brahmin students who are supposed to study Sanskrit at that place. In the December number of the Central Hindu College Magazine, Mr. Govinda Das gives an idea of the ancient indigenous system of Sanskrit teaching, by facts observable at the present day in Benares which is a typical seat of Sanskrit learning.

BOARD AND LODGING.

The bulk of them, about four-fifths, find food, and, partially also such simple clothing as they require, in *Sattras*—alms-houses—established by Indian chiefs and merchants. These *Sattras* generally provide one large meal daily, in the middle of the day; some to so many as 250 students. The students content themselves with that one meal. Clothing and books where not supplied by these institutions are provided by the charity of householders amongst whom the *Vidyarthi*s beg freely for them and for other miscellaneous help. They live about in all sorts of places; the gardens of the well-to-do citizens, groves, *Dharma-shalas*, in some cases the *Sattras*, and even pass nights on shop-ledges reading by the light of the earthen lamp provided by the shopkeeper to help the *Vidyarthi*, for charity and also for the advantage of the indirect watch and ward. The remaining one-fifth or less have either some small private means and residence of their own or live with their teachers, as will be described presently.

PLACES OF INSTRUCTION.

For instruction there are 7 or 8 organised *Pathshalas*, such as the Government Sanskrit College, the *Ranavira* Sanskrit *Pathshala* of the Central Hindu College, the *Darbhangha* *Pathshala*, the *Nagava* *Pathshala*, the *Jaynarayana* School *Pathshala*, the *Bhaskara* *Pathshala*, &c., which teach, roughly speaking, about half the total number of students.

Of the rest, a large proportion unfortunately do not really study anything at all, but waste their time in idleness or worse; and a small portion live with private teachers, who teach in their own houses, helping their *Vidyarthi*s in many ways to get their food and clothing from families where the *Pandits* act as priests, on ceremonial and other occasions and sometimes helping them out of their own pockets. In return they get from these *Vidyarthi*s, offices of *skushrasha* and service, still keeping up the ancient traditional relation of teacher and student. Some of these *Pandits* on the other hand are only nominal *Pandits* and not scholars at all and their following of equally nominal *Vidyarthi*s only a means of gaining a false respectability and its benefits.

HOURS OF STUDY, HOLIDAYS AND RECREATIONS.

The hours of regular teaching are everywhere almost invariably the hours of the forenoon and afternoon, summer rain and winter. Hard brainwork immediately after the midday meal, which is particularly disastrous to digestion in India, where that meal is the principal meal of the day for rich and poor alike, is thus entirely avoided. Early rising is also necessitated. No work

except memorising is done after nightfall, and as a result, the health of the *Vidyarthi* is generally better than that of his compeer of the English-teaching School and College.

There are no long holidays, except in some of the *Pathshalas* where modern influences prevail.

In the evenings, the teacher goes out generally into the suburban gardens or open fields or jungly places with his favorite pupils and all enjoy the fresh air, and some take a little regular physical exercise in the indigenous ways, "dips," "sitting up and down" &c.

COURSES OF STUDY.

With the exception of the *Ranavira* Sanskrit *Pathshala* of the Central Hindu College where some new methods have been very recently introduced experimentally, the usual system of instruction is for a *Vidyarthi* to read all the books, whatever the subject that he wishes to study, with one teacher only. The *Vidyarthi* generally chooses his subject and also his teacher by the reputation of that teacher as a specialist in that subject, and teacher and student try to stick to each other under a system of mutual yielding without any genuine and thoughtful consideration—there are honorable exceptions—of what is best to study for the *Vidyarthi*. Thus a student makes up his mind to become an astrologer, or a *Dharma-Shastri*, and he at once goes and begins with a *Jyautishi* or a *Dharma-Shastri*. No systematic endeavour is made to master the Sanskrit language, or get such a foundation of general knowledge for later specialisation, as is implied in a matriculate in the English Schools.

EXAMINATIONS AND DIPLOMAS

There are, generally speaking, no formal and set examinations. But '*Shastrarthas*,' public 'Controversies,' 'oral attack and defence of theses' at gatherings of students or of *Pandits* at *Sabbhas*—assemblages of *Pandits* called by well-to-do private persons, on ceremonial or other occasions, where cash and other presents are given to them—are constantly taking place, as they used to do between the learned of the middle ages of Europe, and are still practised at some of the continental Universities. At these *Shastrarthas*, the promising student comes to the front, and his reputation is built up gradually till he thinks of moving on into the household life. Then he secures a *Pratishthapatra* or 'certificate of learning,' in the books and subjects he has studied, over the signatures of a number of the leading *Pandits*, and generally goes away to his native town or village and sets up as a *Pandit* himself. The organised *Pathshalas* have now other methods also, of holding written examinations and conferring degrees, and these are coming to be respected more and more with the changing times.

Some points of this system are worthy of imitation e.g., the provision of free board for students, which in India, has hitherto been left to the charity of the *Dharmartha* Departments of Indian States and of great and small merchants. The methods of examination by oral debate &c.; the hours of study; the system of holidays; the evening outings of teacher and taught are also worthy of careful consideration and imitation, wholly or partially.

Other points are equally worthy of thorough amendment, e.g. lack of systematic supervision of the physical and moral life of the students, lack of well-considered courses of study, and lack of some instruction in Western knowledge.

WHAT WOMEN LIKE IN WOMEN.

There is a remarkable article in the November *Cosmopolitan* full of reflections on woman and her likes and dislikes by Rafford Pyke who professes to view woman from the standpoint of her own sex. He says that the mental attitude of the average woman toward all other women is conditioned and influenced by the consciousness of sex. How this consciousness came to her is related as follows:—

Since human beings first appeared upon this earth of ours, the endless strife of man and woman has been carried on—the man against the woman, the stronger against the weaker, the pursuer against the pursued. During that long lapse of time the primitive age in which lonely, homeless creatures wandered in the woods and mated for the moment only, passed into the tribal period of nomadic roving and this into the era when settled habitations gave promise of the home that was to be; savagery shaded into barbarism and barbarism into a rude civilization, and that rude civilization into the extreme refinements of luxurious and enervating culture,—and yet, though all else have been changed, the strife of sex has never changed save only in external forms; and what was true a thousand centuries ago is just as true to-day. Woman is still the prey of man, the object of his keen pursuit, a prize to be won, or a victim to be sacrificed, as the conditions may determine. Back in the misty centuries of the world's first youth, man seized her amid the glades of the illimitable forest by his superior strength and swiftness. In later days, he took her as his portion of the spoils of war, the captive of his sword and spear. In other times he bought her from her family with sheep and bullocks and rough ingots of pale metal. To-day, the resort to force is little known, the forms at least of purchase are discarded; and in place of these, the myriad arts of pleasure and persuasion are employed; yet the respective attitudes of the two sexes have not altered from the time when the still untamed forest girl felt her heart leap with a strange instinctive fear at the sound of eager footsteps in the shadowy thickets. The woman of our time, like the woman of that remotest era, recognizes under all the ceremonies and conventions that have been laboriously invented, the same pursuit still going on; and she sees herself the object of it, with her submission as an ever possible result. It may be for her happiness to yield; it may be for her misery. She cannot tell; and her instinct, the instinct of the hunted thing—impels her to delay, to save herself to fight against the irrevocable surrender, whereof the very dread and mystery possess for her so curious a fascination. The fact that women throughout all the ages have experienced this perpetual distrust of man, this consciousness of being, in a sense forever on their guard against his pursuit of them and his purpose of mastering them, has produced effects that every one can recognize. It has developed traits and attributes and instincts that long ago became hereditary, so that they now are found in every woman sometimes in a greater degree and sometimes in less noticeable measure, but always lying there to be evoked whenever

a crucial test may chance to be applied. Thus, the circumstance that sex is fundamentally involved in the whole question of woman's place has developed in her the sex-instinct, the sex-motive, to such an extent as to render it the dominant factor in her psychological processes.

Having inherited a common nature, sharing a common lot and maintaining a common attitude toward man, he says, that there exists among them all, quite irrespective of rank, or class, or age, a certain sympathetic understanding which may be called the solidarity of sex. It is to this, that the writer attributes the rapid growth of friendship between women. In spite of this, he doubts whether such a thing as friendship in its very highest sense can ever exist between two women. For, the essential elements of friendship being unhesitating confidence and unswerving loyalty, he says, these are precisely the two things which can never by any possibility be given by one woman to another. He says:—

She may go very far. She may tell the other many things that she would hate to have the rest of her small world, know. But the very last and final word of confidence she will never speak, but she will lock it in her heart of hearts, in part because of her inherited timidity, but more than all because she knows herself so well and finds within herself the mirrored image of her sex to warn her. The consciousness of her own insincerity, of her own untruth, of her own weakness, will always put her on her guard against the insincerity, the untruth and the weakness of all other women; and so with the most charming frankness of manner and the most convincing show of laying bare her heart, she will mingle fiction with her fact, tell little half-truths cunningly disguised suppress the vital elements of her story, and with unconscious artistry create an airy plausible romance while she is professedly searching the very abysses of her soul in the fulness of her self-revelation..... Examination will show that the self-sacrifice and the loyalty and the fidelity of women, when these are especially conspicuous are invariably connected in some way with her feelings and emotions. For example, she would make any sacrifice for a man whom she loves, and on the other hand she would shrink from no injustice toward one who had crossed her as a rival. A woman will often refrain from interfering with another woman's peace of mind, if the other woman be her friend; but even this is most usually true when the man in the case does not happen to interest her. She will be discreet and tactful to a degree in shielding those who have put themselves into her power through letters or by confiding secrets to her; but she will be discreet and tactful only so long as she has no powerful reason to be otherwise. Let her be abandoned or let a rival appear upon the scene, and she will use any weapon that comes to hand, betraying any confidence and employing any knowledge that she may have, with the utmost unscrupulousness, to punish the one who has abandoned her, or to thwart and humiliate her rival.

The writer comes to the conclusion that women *aufond* are always traitors to their own sex. As against mankind in general they stand solidly together; but to the one particular man, they are each and all not only willing but even eager to betray the secrets of the prison house. Why is this? Because women do not trust each other. They must be frank with some one. And it is only to some man that she can be frank and yet remain safe. The reason for it is this.

A woman knows that what she tells a man is absolutely sacred to him; that though it aftertime she should do him a grievous wrong, though she should come to hate him and he should come to feel contempt for her, he never would reveal to any mortal the words, the thoughts, the frank confessions that she trusted to his honour.

The foregoing must afford some clue to the traits of character in women, which women would like. The writer sums up as follows:

First of all a "woman's woman" is seldom the sort of woman who makes an instantaneous appeal to men. She is clever without self-consciousness, and she can think and reason, too, and keep a firm hand on her impulses. Then she is discreet and capable of respecting confidences though she never tries to draw them forth. In the next place, she is nothing of a snob, and never makes distinctions between the women whom she knows; and she is humorous and good-tempered, and fond of fun and does not mope when only women are about, but she is a good courader through and through. She does not enter into things that are eccentric or resques but she is very slow to criticise the ones who do, and, she is no prude. Then, last of all, she will not flirt with any man to whom some other woman has a claim. This means that she possesses the sort of conscience which is rare indeed among her sex, for in almost every woman there lurks a wicked little devil of vanity that stirs the heart of even the demurest with a dangerous thrill whenever she begins to poach, however slightly.

These, reason, strength, discretion, generosity and honour, are qualities which most women largely lack and which, women admire in men; and women who seek for an ideal friendship must ask it of a man.

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THE AWAKENING OF INDIA.

William Sharpe, the eminent Doctor who frequently writes to Indian Journals on religious subjects calls upon the Indian people rich and poor, to awake and to dispense to the world, the medicines that made the whole of Asia mild, that is, he wishes that eastern religions should be spread throughout the length and breadth of the land. He asks:—

Will not your Maharajahs, Rajahs, and rich and influential people follow their example, and not only make an effort to teach your own millions through the medium of your own scriptures and through the teachings of the advanced new and high class publications now started in your country, that are languishing for lack of adequate support? Will they, not only do this, but establish a few Missions, say, in the chief cities of England and America? Such Missions would prove a gain to the whole world; they would help in the rapid and efficient restatement of Christianity itself until it would and could assimilate with your own religion, and at no distant day, as time goes, make the world as well as Asia "mild."

Referring briefly to the Mahomedan propagandism in Liverpool, he observes: The Mahomedans have made a praiseworthy effort in this direction; they have their Mosque and publications in Liverpool, England: and if they are not converting many of the English people they are helping to widen out thought in England, and above all, expanding their own thought which very much needed and needs expansion. They are finding out that all knowledge does not lie between the covers of the "Koran," which like the "Bible" has been made a "fetish" of.

To the Hindus, he gives the following advice:—

Your people must get over the antiquated idea that it is contrary to your religion to cross the "great water." They must cross it to learn themselves and to teach other peoples. In this way, alone can they assist in the formulation of a universal religion that would in its turn powerfully assist in bringing about the "brotherhood" of man, without which there can be no millennium upon earth.

SOME INDIAN PROBLEMS.

The *Speaker* a liberal weekly has of late been devoting considerable attention to Indian affairs and its views are generally sympathetic. There have lately appeared in its columns two articles on "Some Indian Problems." In the first, after discussing at length the faults of the present system of administration, the writer makes an effective plea for giving the people a greater voice in the Government of the country. He insists on "the political soundness of a liberal association of people and government in working out the destiny of India."

In the second article the writer deals at length on the economic question to be solved in India.

It is but too true to say that on no phase of Indian controversy is opinion more divided than respecting the economic fruits of British rule.

According to the pro-Indian interpretation of the case lately advanced, India has grown actually poorer since the advent of the East India Company as compared with the contemporary industrial condition of the country. The wealth, population, and national prosperity of India under the Moghul Emperors are attested by all European travellers who visited the East during the last four centuries as surpassing even what they had seen in Europe. The economic policy of the new rulers has since ruined the indigenous industries, impoverished agriculture by an oppressive land-tax, saddled the country with an immense debt, taken an annual tribute of her wealth for which there has been no natural commercial return, and established an expensive administration, from all the higher emoluments of which Indians are themselves excluded. A gradual impoverishment of the country has ensued, and famine has become practically endemic.

Commenting on this the writer remarks :—

This indictment, professedly drawn from official statistics and documents, is met on every point by counter-official statements or explanatory references. Similar charges on certain counts are preferred by historians against the old Moghul Princes. There is ground for the view that a factitious impression of India's wealth and prosperity in the past has been created among strangers by the splendid retinues and general magnificence of her kings and viceroys; wealth obtained in the first instance through an excessive taxation of the people. That a varied, and in some respects specialised, native industry formerly flourished, which has subsequently in great part declined, leaving few occupations to labour outside agriculture, is true enough; a state of things that has affected the old caste system where connected with hereditary trades. The rise of the Company to territorial power coincided with the growth of machine production in Europe, in which England took a leading place. The Protectionist policy of the day of making all external possessions subordinate to home manufacturing interest was enforced in the case of India; and the products of the new power-loom came to supersede those of native manufacture, thus rendering the land mainly one of raw material production. The later English Free Trade policy did nothing to retard this change, which is also to be regarded as a sequence of trade-mutations affecting the East through the pressure of Western industrial enterprise.

While, however, under this more liberal dispensation, the self-governing colonies have adopted whatever economic polity, protectionist or otherwise, seemed best calculated to promote their native industrial interests, India still continues in these matters largely subordinate to the determining English interests of her rulers. And the right of India to a controlling power over her internal industrial concerns is a consideration closely connected with that of her political autonomous development. Much of her exported material, such as wool, hides, oil-seeds, molasses, returns again to India after undergoing manipulation by foreign operatives, where the application of a little skilled labour on the spot—now sadly lacking—would afford to millions of her people the means of subsistence, besides economising the loss incurred through freight and other charges. The advancement of technical knowledge and the fostering of native enterprise in directions where there are now several fields simply awaiting intelligent exploitation becomes therefore a task supremely incumbent upon the Government, and one falling consistently within the character and resources specified above, when freed from detailed labours that might be gradually entrusted to native bodies. For the success of any such action is equally contingent on the energetic co-operation of the native community interested therein, which again can only be expected under an enlarged participation in the general councils of the State. Neither are the signs wanting that it would be forthcoming.

Similarly with agriculture :—

The relative poverty of the cultivator varies, of course, over different districts. Apart from the disputed incidence of the land-tax, one contributory factor to his poverty is the local congestion of population due to tenacious hereditary custom. There is still land enough for the people if they can be induced to migrate to territory awaiting development, which can only be effected under intelligent colonisation schemes. And although the natural uncertainty of the rainfall remains an element inimical to his well-being, there is much yet to be done by way of mitigation in the extension of irrigation provision. The emancipation of the poorer peasantry from their practical dependence on one season's crop, with the prospect of famine if it fail, requires in truth heroic measures. At his best, the ryot has the reputation of a competent and industrious farmer; at his worst, will struggle on patiently under great difficulties, a state of things due in part to the absence of facilities for improvement. And in speaking of the promotion of technical knowledge, we have in view its corresponding application to the improvement of native agriculture; wherein the village reorganisation touched upon in the previous article should prove of assistance.

But as all these proposals mean at the outset fresh expenditure that cannot, under present charges, be met, we come at once to the troubled question of Indian finance. The chief issue here is the cost of the military establishment and the vast sum annually remitted to England—a third of the net revenue, or over £16,000,000—on account of interest on debt and other charges of the civil and military services. The writer pleads that these large sums should be set free for the amelioration of the people of India.

INDIAN VERNACULARS.

A very noteworthy article in *East and West* is that of Mr. S. M. Mitra. Dr. B. D. Basu's article on Indian Vernaculars comes in for a good deal of adverse criticism. Mr. Mitra holds that English is, to a certain extent, and shall be, the *lingua franca* of India. The talk of the promotion of Vernaculars at the expense of English is putting the clock back a hundred years. No Vernacular in the opinion of Mr. Mitra, has the potentiality to become the one language of India or even of any District of India. He can hardly answer the modern needs, woefully unequal as it is, to express many advanced ideas in Science and Philosophy. Dr. Basu's scheme of promoting the Vernaculars into the first language, and of degrading English into the second language is positively harmful, inasmuch as it tends to *separate, not unite the peoples of India*. To say that in the light of Western influence, the Vernaculars have been thrown into the shade, shows complete ignorance of the Vernaculars. Bengali, for instance, is now rich in books on various subjects, and most of them have been deservedly pronounced to be of high merit. It has, on the contrary, considerably advanced by reason of contact with the Western civilisation. It is proposed that the Native States at any rate may see their way to the promotion of the Vernaculars within their own dominions; and in this connection Japan has been held out as the example. But it is forgotten that there is only one language and one religion in Japan, and notwithstanding this there had been considerable difficulty in adopting the language to cope with modern needs and requirements. Reference is here made to the article on Japan in the *Encyclopædia Britannica*. When such is the case with Japan, the difficulty is vastly increased in the case of India, where there are half-a-dozen and more Vernaculars for every Native State. Taking Hyderabad, for example, Dr. Basu is challenged to say what the Vernacular of that country would be. It is, again, deplored that English Education has affected the condition of the Indians for the worse; but the fact that hundreds and thousands of natives find employment in the firms is lost sight of. The taste for English ware in preference to the Indian is accounted a great grievance against English; but this is only an admission of weakness, showing the lack of strong national ties. Dr. Basu despairs of any Indian acquiring such a mastery over English as to talk and write like Englishmen. This is needless despair; for the names of R. C. Dutt, R. C. Mitra, Gupta, Mukerjee and a host of others are a sufficient testimony

to the aptitude of the Indians for English. The signal success of many of the Indians in the I. C. S. Examinations is a sufficient proof of the falsity of Dr. Basu's statement. The article concludes by saying that Dr. Basu's position is quite untenable, and that while "it is good to be national, it is infinitely better to be rational."

WOMEN LAWYERS FOR INDIA.

Anent the agitation now being conducted in England by Miss. Cornelia Sorabji with a view that Purdahshins in India may be provided with legal help which is now denied to them on account of women lawyers not being admitted into the courts in India, the London correspondent to the *Green Bag* a law journal of America writes very hopefully of the agitation.

It is now proposed ~~that~~ women lawyers be admitted to practice in all the Indian Courts in whose jurisdiction this caste prevails, and that all Purdahshins be acquainted with the fact and be encouraged to employ them. These women lawyers could see their clients and have unrestricted interviews face to face with them, free from the presence of third persons. This plan is now being urged in their country by a Miss Sorabji, who is herself not only an Indian woman but a lawyer. She is the peer of any English or American woman so far as intelligence and education are concerned. She holds a Bachelor of Civil Laws degree from Oxford University, and after considerable training in a solicitor's office in London has practised for seven years in India. She has recently written a long article in *The Times* to lay the case of her Indian sisters before the world, and her story has been supplemented by the narration of actual experiences by eminent local Indian judges, or rather local English judges in India, for all judges of the High Court in India are appointed from the English bar. The excellent results which have attended the agitation in favor of the general employment of female physicians among the Indian woman, who by reason of their caste cannot be treated by male doctors, gives encouragement to believe that a like success will be achieved by female lawyers in India. This is a matter which has an additional interest to Americans from the fact that it will doubtless be brought about under the auspices and patronage of Lady Curzon, who, while the wife of the Viceroy of India, is a womanly American woman.

PERSONAL POWER OF THE PRESIDENT OF THE UNITED STATES OF AMERICA.

A. Kingsley Glover who professes to have studied the polity of every modern nation classed as "civilized" writes to the November number of the *Arena* that American democracy has become the rule of *one* by consent of the many. Of the personal powers of the President of the United States, he says:

As time goes on we clearly see a greater and greater concentration of power in the hands of the executive, until in our own day—during the present administration—the President exercises an ultimate personal power displayed in no European monarchy, barring Turkey, which is primarily Asiatic.

Even the Czar of Russia, he says, is at the mercy of his own ministers, with not even a legislature to help for good or evil. The following gives a summary of the powers exercised by the President with the consent of the people of course, and the feelings with which they are looked upon by some thinking men of the United States.

To-day President Roosevelt is exercising both legislative and judicial power, not to speak of authority over the army and navy. The new Army bill, creating a General Staff, is for the express and undisguised purpose of placing the army directly under the President, the chief of Staff to be the President's own appointee through the abolishment of the present office of Lieutenant-General.

This concentration of military power in the President's hand at all times, in peace as well as in war, is one of the many evidences of the trend of things toward a condition unknown to our fathers, and by which our President may become more monarchical than monarchs themselves. In the Schley-Sampson trouble the President actually sat as a final Court of Appeals, and became for once the Supreme Judge. Beyond his verdict (amounting to a sentence), under the circumstances nobody dared appeal. In fact, there was no other Court to appeal to.

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But it must not be said that the Executive set *himself* up as such a final court. It was the act of the parties to the case—the act of the whole people, who, through the press, demanded of the President that he become, for the first time in our national history, the ultimate source of appeal in an important and troublesome controversy. By so doing the people surrendered some of their democratic principles, besides establishing a new and very dangerous precedent—the very precedent upon which was built up all the power of the Roman Papacy, *An "Appeal" to one man!* The President had no more right to sit as judge in the naval affair than did the least-known citizen; for had not the duly organised Board, under Admiral Dewey, sat, deliberated, and handed down its verdict? The arbitrary setting up of the President as a court of appeal,—*final* appeal,—if not unlawful, was at least un-American and a precedent that, if followed in the future, may furnish the occupant of the White House with untold power when applied to government and to politics.

And just as the people allowed and advised the making of our President a supreme judge in an affair affecting the naval history of our country, so has it been in the Philippine matter. The sovereign people, by vote of their Congress, surrendered the whole Philippine case to the President, empowering him to govern the Islands as an autocrat, subject to nobody, and supreme over both the civil and military branches of the Government in everything affecting our new possessions. And so it goes on—the people relinquishing their own sovereignty into the President's hands in order to get rid of the trouble of *themselves* governing, and the President always accepting such authority as the people refuse to exercise.

It may have been a quick way of ending the naval controversy to have made the President final judge and arbiter, and it may also have been an easy way to manage the Philippines to have given all power into one man's hand; but the *precedent* was bad, and may be the outward sign of that rapid concentration of political power in the President's person toward which all careful Americans look with some feeling of dismay and dread.

As they now stand, a constitutional monarchy under a wise monarch is safer than a democracy under a President into whose hands the people are so prone to place unlimited authority in political, governmental, or judicial affairs, as fancy may suggest from time to time.

SPEECHES OF THE DAY.

The Congress Presidential Address

by *Romesh Chunder Dutt, C. I. E.*

Address at the Social Conference

by *Hon. Mr. Justice M. G. Ranade, C. I. E.*

Address at the Muhammadan Educational Conference

by *Hon. Mr. Justice Amir Ali.*

PRICE 6 (six) ANNAS.

APPLY TO—G. A. NATHAN & CO., ESPLANADE, MADRAS

DEPARTMENTAL NOTES.

Educational.

THE INDIAN UNIVERSITIES' COMMISSION.

A Conference of Teachers in Arts Colleges was held in the Senate House on the 1st and 2nd of December to consider the report of the Universities' Commission, the Rev. Dr. Morrison of the General Assembly's Institution being in the Chair. All the Arts Colleges, urban and suburban not under the direct management of the Government of India were represented in this Conference of Teachers. Of Mofussil Colleges, the Jegannath College of Dacca, and Raj Chandra and Braja Mohan Colleges of Barisal had the representatives in the Conference. Twenty-four resolutions were passed after some discussion, most of the resolutions being carried unanimously. We give below some of the most important resolutions that were passed:—

III. That this Conference disapproves of those recommendations of the Senate which propose (a) That fellowship should be tenable for a fixed term only (*one dissentient.*) (b) That the Director of Public Instruction should be *ex-officio* Vice-Chairman of the Syndicate, (*nem. con.*) (c) That the Syndicate should be elected by the Senate instead of by the Faculties (*nem. con.*) (d) That Boards of Studies should be appointed by the Senate instead of by the Faculties. (*nem. con.*) (e) That there should be a fixed maximum number of members of the Senate. (*one dissentient.*) (f) That the power of disaffiliating Colleges should rest with the Syndicate instead of with the Senate. (*one dissentient.*)

V. That the Conference while recognising that the University should exercise an effective power of control over affiliated Colleges, disapproves of the degree of control recommended by the Commission, and in particular of the interference of the University in the matter of fees. (*nem. con.*)

VI. That this Conference while considering it desirable that the University should exercise some degree of supervision over affiliated colleges is of opinion that the methods of supervision recommended by the commission are likely to lead to undue interference; that the nature and extent of supervision as laid down in sections 57 and 58 of the Report are left very vague and need to be more clearly defined; and that individual Colleges

should be left free to administer their finances as they think fit without interference on the part of the University so long as a proper efficiency is maintained. (*nem. con.*)

VIII. That this Conference disapproves of the suggestion that the B. A. Course should include four instead of three subjects, especially in view of the fact that the standard of the examination is to be raised. (*nem. con.*)

X. That this Conference is of opinion that the teaching of English in Schools stands in need of considerable improvement and that a sounder and more practical test in English is required at the Entrance Examination than is at present employed but considers that the only method of securing this end is to alter the nature of the present examination. (*nem. con.*)

XIV. That this Conference of teachers disapproves of the recommendation of the Commission that the study of English in schools should be postponed. (*nem. con.*)

XV. That this Conference disapproves of the recommendation of the Commission that Second Grade Colleges should not be allowed to continue their existence as such. (*nem. con.*)

XVII. That this Conference is of opinion that before questions of affiliation and disaffiliation of Colleges are considered, there should be an authoritative statement as to what is held to constitute efficiency and inefficiency. (*nem. con.*)

XX. That this Conference approves of the principle underlying the proposals of the Commission which relate to the question of proper residence for students and would welcome any practicable scheme securing such. (*nem. con.*)

XXII. That this Conference approves of the proposal to establish a University Central School for advanced courses of study, if it be understood that individual Colleges will be left free to provide for such courses of study themselves if they think fit. (*nem. con.*)

XXIII. That this Conference approves of the suggestion of the Commission that the University should establish a degree of licentiate in teaching provided that Principals of Colleges and Schools be not required to employ only such as have obtained a license. (*nem. con.*)

Literary.**UMA ON DHANANJAY.**

(On the steps of the Temple a woman sat beside the sleeping Dhananjay.....Often she looked on the unconscious, weary sleeper, and as often her eyes were dim with tears,

The sun was high up when the sleeper opened his eyes...

—Romesh Dutt's *Lake of Palms*, Page 245)

Wonder of wonders ! How comes here my lord !

My eyes belie me ! What ! Is it not he

My once unerring loving Lord ! Alas !

How changed is he entire in face and form !

Why comes he here ! He seems to be too tired.

How sound sleeps he, here on these steps, alone,

At an unusual hour ! Have all those fiends,

His fawning friends, who dragged him down

Into the pit of soothing hell of sins,

Left him on earth a vagrant now ? Alas !

Thou, son of fortune, great, what evil lot

Is thine ! Where are thy boon companions now !

Know ye not, read ye not at least in books,

That creatures, base, with honeyed words, surround

Us in weal and fly away in woe !

Art thou at least now free from those dire sins

That cost thee health and wealth and wife and joy ?

Art thou now here asleep dead drunk, my lord ?

Ah ! Does thy mouth smell harsh ? No, no, my Lord

God save thee from the cup and sanctify thee !

Art thou at least now free from those fair-skinned

Dark-hearted damsels whose fine outward smiles

Are, 'las so many snares to catch their game ?

Those wicked souls who stole away thy heart

From mine—Where are they now, O my Dhananj !

Not even one of them is now by thee !

Knew ye not, read ye not at least in books,

That damsels lavish love for money 'lone !

Why comes he here ! What's it that brings him here

Could it be that he comes in search of me ?

What ! That can never be ! In quest of me

Whom he 'e'en ceased to see for months and months

Together while with him ! why then comes he ?

I can't divine, I can't divine, who knows !

He might have come for me. Sometimes, the bad

Turn changed into the good so suddenly.

Remembering our pure early happy love,

And feeling that his evil ways have caused

My flight, it might be he has come in quest of me.

Ah me ! would it were so ! my erring Lord

Once more my loving Lord ! What ! Can that be !

Thou holy God ! I feel my husband's heart.

It beats not harder beat. Remorse too deep

For words and tears seems weighing down his heart.

O gracious Heavens ! Let him be mine once more.

O my woman's weak heart ! Be constant, calm:

Fail me not now : be valiant like a man.

Ah ! there he rises from his deep sound sleep.

T. SREERAMULU, B.A.,

Rajahmundry,

First Grade Pleader

MATHEW ARNOLD.

Sir Joshua Fitch in his review of Herbert Paul's "Mathew Arnold," a new addition to the English Men of Letters Series, does not agree with him in considering Arnold's failure to get a Charity Commissionership, as a "disaster to the Public service," a 'Scandal.' It is always a difficult problem for statesmen in power to choose between efficiency of service and patronising men of genius. In the case of Burns as an exciseman, or Wordsworth as distributor of stamps, the problem was not well solved. The office of Charity Commissioner requires a certain amount of legal knowledge, which Arnold for one would not pretend to. Even Arnold himself evinced no consciousness of grievance when he was rejected in favour of a better applicant. Mr. Gladstone however, showed a better appreciation of the merits of Arnold by bestowing on him one of the very few literary pensions that it was in his power to award. It was worth £250 a year, and it carried with it no burdensome and inappropriate duties, leaving him ample leisure to carry on his own work. Even this pension he did not take without reluctance, for he feared it should draw from the public purse a sum which might be better deserved by other literary men.

**KNOWLEDGE DIARY AND SCIENTIFIC
HAND BOOK FOR 1903.**

This is a distinct improvement on its predecessors. It contains original Descriptive Articles on practical works with the spectroscope; the observation of variable stars; the choice of a microscope; meteorological observations; systematic Botany; and Monthly Astronomical Ephemeris. The paths of the principal planets for the year are illustrated with charts. There are also Astronomical notes and tables; an account of the celestial phenomena of the year; and twelve Star maps showing the night sky for every month in the year, with full descriptive accounts of the visible constellations and principal stars. A calendar of scientific events and an obituary for the year are other useful features of this excellent Diary.

Legal.

THE LAWYER AND HIS PROFESSION.

It is to be lamented that the tendency of the day is to commercialize, if I may coin that term, the noble science of the law. In our great cities especially we find the practice of law largely degenerating into a sort of trade, where the influence of the almighty dollar appears to dominate the bar rather than the spirit of those lofty ideals which animated the great lawyers of past generations. We find, for example, men persistently violating our long-established canons by a reprehensible method of self-advertisement.

Yet, perhaps it is in accord with the spirit of the day. In these times the keenness of competition is felt in every branch of trade, of commerce, and of intellectual labor. As the complexity of civilization increases, as its manifold forces are developed further and further, the struggle for existence becomes more and more intense, and it goes on at the bar as well as in all the varied pursuits of life. Yet I am rejoiced to say, for the credit of our fraternity, that many of the old habits and tendencies which were once a reproach to the bar have disappeared as completely as the Court of Exchequer and the ancient order of Sergeants at Law. It may have been partially true fifty years ago, as as Dickers, with that exaggerated emphasis for which he is noted, has said, "that the one great principle of the English law was to make business for itself;" and upon that assertion he built up the formidable indictment against chancery and chancery practice which you will find in the pages of "Bleak House." But such an indictment would to-day be thrown out by any grand jury of the vicinage. The "making of business" by the promotion of litigation, the multiplication of papers and proceedings, the prosecution of frivolous appeals, belongs, if it belongs to any, to the very dregs of the profession, who bear the same relation to the bar which the cowardly deserter bears to the tried and faithful soldier.

The popular idea about the lawyer is that his great, and, indeed, his principal function is in the trial of causes before Courts and juries. It is true that this is an important branch of the profession; that it affords the most conspicuous field for the exercise of the highest powers of the intellect—the acuteness, the mental grasp, the mastery of men, the clear and convincing eloquence which go to make up the great advocate.

After all, the trial and test of the useful lawyer comes not so much in the glare of the forum as in the daily work of conference and counsel in the quiet of the consultation room. It is there that the puzzles of life are presented and studied and solved. It is there that terms and provisions are settled of the contract which is to make or mar a fortune. It is there that are thought out the moves in the great game of chess, which mortals are always playing. It is there that the plans are devised, considered, and adopted upon which the battle is to be fought, the campaign conducted. The man of the court room may be—indeed, he is—the man of power and the man who draws to himself the attention, the admiration and the applause of the public; but the work which tells, the work which endures, is the work of the office, the library and the study.

My brothers, in the every-day work which you and I have to perform, it is the adapting of principles to the facts of our case which is the task we are compelled to execute. We come in contact with the events, the incidents, the complicated situations of life. It is not what the theoretical rule is, but the fitting of that rule to our client's case, which affords the principal problem for our solution. The multiform manifestations of the life of the times, present to us the shifting surface upon which we must engrave our lines and our inscriptions. We cannot afford to rest with the knowledge which we have gained in the study, but we must add the experience which we acquire in the workshop. In the words of a great lawyer, "Unless, like the pious and fanciful enthusiast in 'Old Mortality,' we occasionally deepen the letters of the inscription they will soon be overgrown with moss and lichen, wear away by exposure, and leave not a trace behind of what was designed to be engraved for a perpetual remembrance." Haste and heedlessness will not bring, fame or usefulness. One night in the blast furnace will make mountains of slag, but pearls grow and diamonds crystallize after long years—years which often seem slow and tedious, but which lead to the crowning glory of pure and perfected wisdom.

What Lincoln called "the mystic chords of memory," stretching back to the days of youth and of ambition vibrate with peculiar melody. I feel that it would be a glorious thing to begin over again the lawyer's life in the light of the experience which has come to all of us who are of my own years. What could we not accomplish? How faithfully would we pay the debt we owe to our profession! We have realized that the law is no "lawless science," no "myriad of precedent," no "wilderness of single instances," but the perfection of reason, the last result of human wisdom, a structure built upon the broad foundations of principle. May we always be her worthy exponents, and may we demonstrate to mankind that "the seat of the law is the bosom of God: her voice the harmony of the world."—From an address by Adrian H. Joline, Esq., of the New York Bar before the Maryland Bar Association.

Trade and Industry.

THE IMPORTANCE OF HOME COMMERCE.

The following advice which is of universal application has been taken from the address of Mr. Andrew Carnegie the millionaire philanthropist delivered in October last to students as Lord Rector of St. Andrews University. There is a great difference between a home and a foreign market, which is not much dwelt upon in Europe, to which I invite your attention. Exchange of products benefits both buyer and seller. With British home commerce both are Britons; with foreign commerce one only is a Briton, the other a foreigner. Hence, home commerce is doubly profitable, and this is not all. When the article exported, such as machinery or coal, for instance, is used for developing the resources or manufactures of the importing country, and enables these to compete with those of the exporting country, the disadvantage of this foreign commerce to the seller, except the profit upon the sale, is obvious. How different when the machinery is sold at home, and develops home resources continually. Here is another important point. The relative importance of the two markets is often lost sight of. The home market of America takes 96 per cent. of all manufactured articles; only 4 per cent. goes to foreign markets. Even Britain's home market takes four-fifths of her manufactures; only one fifth goes abroad. Politicians give far too much attention to distant foreign markets, which can never amount to much, and far too little to measures for improving conditions at home, which would increase the infinitely more important home market. If the people of the United Kingdom could spend even £1 per head more per year, her home commerce would be increased more than the total value of her exports to all of Australasia, British North America, and China combined. Truly foreign commerce is a bragart always in evidence, home commerce the true king. Proceeding to compare the habits, conditions, intelligence, and spirit of the masses of population in different countries, Mr. Carnegie paid a high tribute to the German in the United States. In comparing Britain with the continents of Europe and America, much was seen unfavourable to Britain's industrial position and to the comfort and happiness of her people, both employers and employed. The former failed to give business the unremitting attention, and to display the energy and enterprise of the founders of the practical monopoly of the past. They generally regarded it as only a means to win entrance to another rank of society.

The employed think too much of how little they need do, too little of how much they could do. Both classes still took life easily in this day of competition, which only the day of established monopoly could support. Employers would find it much to their own interests to give to their ablest employees shares in the business. The more given in this form the more would flow to the employer. The great secret of success in business and of millionaire-making was to make partners of valuable managers of departments.

STATE PROTECTION TO NATIONAL INDUSTRIES.

H. M. Minister at Bucharest forwards an extract from the "Curierul Financiar" on the subject of the State protection granted in Roumania to national industries. This extract states that this protection is of two kinds, viz., direct and indirect; direct by the imposition of taxes on importation, and indirect by the concession of advantages such as exemption from Customs duties on raw materials; reduced railway rates for transportation, &c. There are three kinds of industry which benefit:—(1) Timber cutting, petroleum boring, and such industries. (2) Industrial enterprises for which the raw material is wholly or for the most part produced by the soil of the country. (3) Manufactories which use raw material wholly or for the most part imported from abroad. Only two of these classes of industry, however, according to the "Curierul Financiar," deserve protection; the other, namely that which imports its raw material, has no chance of success in the country and causes considerable loss to the State, owing to the fact that if it did not exist the products themselves would be imported from abroad, and the State would thereby benefit by the duty collected.

In an article published in the "Revista Romana" on this subject two typical instances are given, viz.:—The manufactories of coarse cloth and cordage, which import all their raw material from abroad. By means of detailed statistics it is shown that these industries cause a loss to the State of nearly 1,480,000.

The Journal adds that the idea is rapidly gaining favour that the State should cease its protection of those industries which are dependent on imported raw products, and that a distinction should be drawn between those industries which will thrive in Roumania, and those which will not. In this way all State protection will be directed to those industries which have as basis agricultural and like products.

Medical.**ELECTROCUTION.**

It is a matter of unfortunate experience that occasionally persons are killed by accidental electric shocks (says the "Electrical World and Engineer"). That is to say, they receive a shock and fall down unconscious, and from this state they never revive, so that in the course of a certain number of minutes or hours there is no doubt in the minds of the most unskilled observer that the person is dead. In some cases, however, persons recover, either with or without the aid of assistance, such as artificial respiration and stimulants. The fact that artificial respiration sometimes restores suspended animation several hours after loss of consciousness by drowning has raised the question from time to time as to whether similar treatment can restore animation to the electrically shocked. As regards shocks accidentally received, efforts should always be made to resuscitate the unconscious victim of accident. The question as to whether he can be revived should be settled by trial, and failure not accepted until the case is clearly hopeless. In the case of electrocuted criminals, the conditions are entirely different. When a man receives an accidental shock, the muscular contraction usually tends to throw him violently away from the contact. Moreover, the resistance of the accidental path through his body is usually high. The current he receives is, therefore, under ordinary circumstances, neither powerful nor prolonged. Under the conditions of electrocution, however, the current application is relatively both powerful and prolonged. In fact it is sufficient, at least in some cases, to raise the temperature of the body appreciably, owing to Joulean effect, and invariably produces lesions fatal to life. Considering the number of electrocutions that have been made since, the existing New York State Law came into effect, there can be no question that the subject dies by the effects of the electric shock, and is dead beyond all hope of recovery before the autopsy takes place.

RESTORING THOSE APPARENTLY DEAD.

Many cases are on record in which persons apparently dead have been restored to life by the persevering practice of what is known as artificial respiration, and it is quite certain that in cases of drowning or other forms of asphyxiation hopes of restoration should not be given up until a long time has been devoted to the necessary work. Rhythmical traction of the tongue has been known to revive the respiratory function when other means have failed, and Dr. Labrode, of Paris, has contrived for this purpose a small machine which

can be worked either by clock-movement or electric motor. In the course of his experiments to test the value of this remedy he chloroformed a vigorous bulldog, weighing thirty-five pounds, to such an extent that there was no perceptible respiration. After fifteen minutes' tongue-traction the dog recovered sensibility. In another experiment anæsthesia was carried to a much further point, and in this latter case the animal recovered its faculties after two and a half hours' tongue-traction. With regard to the human patient, he is laid on his back, while the little instrument is placed on a stand which projects over his chest. A pair of broad tweezers grasps the tongue, and is attached to the mechanism, which keeps up a continued pulling in-and-out action. Dr. Laborde's experiments point to the assumption that although an animal organism may have apparently ceased to live externally, the germ of life still persists internally, and can be made to assert itself by the means described.

POISON ABSORBING QUALITY OF COLD WATER.

In connection with the subject of water, there is one peculiar property of that liquid, with which every one should be made acquainted, and that is, its capacity for absorbing impurities, which increases proportionately, the colder it gets. Hence, water that has stood in an insufficiently ventilated sleeping chamber all night, is not only unpleasant, but positively injurious to drink, since it readily absorbs the poisonous gases given off by respiration and the action of the skin. An ordinary pitcher of water, under such conditions, at a temperature of 60 degrees will be found to have absorbed during the night from a pint to a pint and a half of carbonic acid gas, and an increase of ammonia. Ice water is an objectionable drink at all times, but if it is indulged in, the vessel containing it should never be left uncovered in sleeping or sitting rooms because at freezing point its capacity for absorbing these deleterious substances is nearly doubled.

THE LAKE OF PALMS.

By Romesh Chunder Dutt, C. F. S., F. C. S.

This is a novel which deals with Indian Domestic and Social Life. Mr. Dutt has depicted scenes and characters of the Indian home, the Hindu Joint family system, the ladies in the Zenana, the fasts and ceremonies performed in the Hindu households, pilgrimages to celebrated shrines, the influence of English education and Western thought on the younger generation, the aspirations of young Indians for political and social reforms, and the several changes, political, social, religious and industrial which India is undergoing at the present moment. This is a novel for all.

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Science.

DOMESTIC USES OF AMMONIA.

Ammonia is a most useful article, and should always be kept in the house. Put a teaspoonful of ammonia in a quart of warm soapsuds, dip a woollen cloth in it, and go over your soiled coat, gown or any woollen goods. A pint of hot soapsuds in which a teaspoonful of ammonia is put, will quickly clean your silver, by letting it lie in the solution for a short time, then rub with a soft brush, or chammois skin. For washing windows and mirrors it has no equal. It will remove grease spots from any fabric without injury. Put on the ammonia nearly clear; lay blotting paper, and set a hot iron on it for a moment. A few drops in a bowl of water will cleanse and whiten laces and muslins beautifully. It is good to add to a hot bath. Nothing is better to remove dandruff from the hair. For cleansing hair and nail brushes it is equally good. For house plants, five or six drops to every pint of water, once a week will make them flourish. Have a glass stopper in the ammonia bottle as it eats away corks.

THE LIGHT-DISPERSING POWER OF THE GLOW-WORM.

The light-dispersing power of the glow-worm has been attributed to several causes. It was at one time thought to be caused by phosphorous, but this theory has not been confirmed by later researches. Some experiments have been conducted by a French naturalist who proved that the illumination is used as a means of signalling between individuals of the same species. He placed a glow-worm in a glass tube, but it emitted no light until others of the same species approached; then to attract their attention it emitted jets of light in rapid succession. These are responded to by the other insects and the moment the imprisoned one was assured that it had attracted the attention of the new comers, it ceased to emit light.

DANGER IN THE INCANDESCENT ELECTRIC LAMP.

The employment of the incandescent lamp for the display and illumination of shop windows containing dry goods is generally considered safe, but several experiments that have recently been carried out prove this contention to be a fallacy. A number of 16 candle-power incandescent lamps were enveloped in raw cotton, and at the end of a few minutes the material commenced to smoke. Directly a draught of air such as is caused by the opening of a door, came into contact with the cotton,

it burst into flames, and the bulb of the incandescent lamp immediately collapsed.

Investigation as to the cause of this peculiarity showed that the thin glass shell of the bulb of the lamp softened under the influence of the heat gathered by the cotton from the incandescent filament, and when the draught of air came into contact with the lamp, the softened glass caved in under the air pressure, so that the filament fired the glowing material.

In view of these interesting experiments, caution should be observed not to place cotton or similar fabrics too near an incandescent lamp, as is often done for decorative effect, otherwise great risk of a fire breaking out is incurred. The liability of combustion from this cause is further accentuated where incandescent lamps covered with a coloured varnish are employed, as the varnish affords a stronger incentive to combustion.

BREATHING THROUGH THE MOUTH.

It is unwise to breathe through your mouth. If you do the lungs will be left an easy prey to maladies of the chest. Thousands of people contract this dangerous habit, which is a certain life shortener. If you sleep with your mouth open you will get about half the benefit of a night's rest. This is frequently the cause of "that tired feeling" on waking in the morning. If there be any epidemic floating about, you double your chances of catching it, and halve your chances of recovering from it because you weaken the lungs.

Never pick the teeth. It will make a difference of years in the life of your teeth, and will send you to the dentist before your time. The habit, even after meals, will, sooner or later, break the enamel of the teeth and cause decay. Some people contract a perpetual habit of picking the teeth when they have nothing else to do. This will cause a good, sound set of teeth to decay at least six or seven years before they ought to. You will lose your sleep, pay a dozen dentist's bills and then wish you had left toothpicks alone. Cleanse your teeth, instead, with a good powder after every meal, if possible. And above all things, see that the tooth brush is properly adapted to the mouth or lacerated gums and toothaches will follow:—*Science Stiftings.*

Hebrew Origin of the Brahmins.

By MR. M. VENKATARATNAM, B. A.

Price per copy 4 as. Postage extra.

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General.

THE RICHEST OF BRITISH INVENTORS.

Lord Kelvin is the richest of British inventors. He is now receiving royalties on 14 of his patent appliances which have been fitted on board the latest Japanese war-ship. He was the son of a small farmer and was apparently destined to till the soil, as his forefathers had done for several generations. Chancing to wander one day through the village churchyard he came to an old and forgotten sun-dial, the strange marks of which were so interesting to him that he was unable to rest until finding out their meaning. This investigation, which took the country boy some little time, aroused his interest in matters scientific with the result, as all the world knows, of producing the greatest all-round scientist of his age.

A YEAR OF TERROR AND DISASTER.

It is deserving of special notice, that during the first half of this year six continents have suffered from earthquakes, with volcanic eruptions accompanying them in five places. The following is the remarkable list: January—Nova Scotia, Croatia, Mexico, Lisbon; February—Russia, Schemachi; March—Turkey, Italy, Tchanganeria and Lucca respectively; April—Guatemala, Iceland; May—Martinique and St. Vincent (volcanic), Spain, France (South Bordeaux and the Creusot district); Alaska, (Mount Redoubt, volcanic), Croatia, Mexico, San Francisco, Florida, the Cape Peninsula and Greece; June—Italy, Russia and Chile, in Volitri, Baku and Chaco respectively (the last two volcanic), St. Vincent, Sicily, India, Himalayas; and in July, Turkey and Salonica.

THE MOHAMEDAN ANGLO-ORIENTAL
EDUCATIONAL CONFERENCE.

The Report just published of the fifteenth Sessions of the Mohamedan Anglo-Oriental Educational Conference held in Madras last December bears a remarkable testimony to the happy relations which obtain in South India between the Hindus and Mussalmans. Several Hindus took a leading part in advancing the cause of the Conference in the Mofussil and a few of them subscribed handsomely towards its funds. The number of Hindu members seems to have been very large, larger than at any previous sittings. Raja Sir Savalay Ramasawmy Mudaliar, Kt., C. I. E., instituted a scholarship for Mohamedan students aspiring to a degree in Law. The Mohamedan leaders of the Conference have, in their turn, appreciated the services of their Hindu brethren

in the cause of their advancement in a manner worthy of the occasion. Nawab Mohsin-ul-Mulk, the Honorary Secretary of the Conference, said:—

"Until the Hindus and Mohamedans in India sympathise with each other, until they maintain cordial and friendly relations between them, until they cast off all prejudices and meet each other in a spirit of sincerity and catholicism, they do not deserve to be called brethren inhabiting the same fatherland. And whosoever does not endeavour to maintain and promote friendliness and cordiality between these communities, be he a Hindu or a Mussalman, does indeed sin against the interests both of his country and of his nation."

Referring to the popular belief that the Aligarians are hostile to the Hindus, he proceeds to say:

"This is a mistake altogether. This is a blasphemy against us, the inhabitants of North India. We Hindus and Mohamedans are brethren; our mutual intercourse has always been friendly; and we have always shared with each other our sorrows and joys."

He then goes on to explain that the impression which has gained abroad that they are hostile to Hindu interests is perhaps due to their differences of opinion in respect of certain political matters, which however he is careful to add, should not be allowed to affect their social relations.

AN INDIAN STATE OUTSIDE INDIA.

King Edward has ordered that Rajah Brooke, of Sarawak, shall be recognised in Great Britain as an Indian Prince of the first class, on the same footing as Holkar and Gwalior. The story of Sarawak, says the "Morning Leader," reminds one rather of Elizabethan than of modern times. James Brooke was an officer of John Company, who outstayed his leave in England and consequently lost his post in India. Coming into some money he chartered a vessel and proceeded to down piracy in the Bornean seas. The Sultan of Borneo, as a reward for help against some rebels, gave him a principality, and on free trade principles, with a free port, he made it flourish exceedingly. Succeeded by his nephew Sir Charles, Sir James Brooke really founded a dynasty, and the nephew placed his principality some fourteen years ago under the protection of Great Britain. Since that time it has been recognised as an Indian State, its ruler being entitled to salutes of nineteen guns, and so on. But in Great Britain Sir Charles had no status, and this the King has now arranged. The Rajah takes his place as one of the recognised chief feudatories of the Empire.

KING EDWARD'S WILL-POWER.

The veteran, John Hollingshead, had in the "Morning Leader" of the 18th November last a charming article on "Government by Will-power," from which we make this quotation:—

The King of England, after a long and weary apprenticeship, is just acting on his knowledge, and adding to it every day. It remains to be seen what will-power he possesses. He showed it was considerable by putting an end to the South African war in the open field and handing it over to head clerks of the Milner type, who have had the luck to be born in an age when heroes are cheap and a low standard of excellence is accepted. Yorkshire is not the only county that turns out shoddy cloth, and Tottenham Court Road not the only street market that turns out shoddy furniture. The King's illness, happily defeated by care and nature, and the coronation ceremonies checked his will-power for a short time, but did not destroy it, and its manifestation was seen in the sudden movement of the Colonial Secretary. The King is a great believer in the education of travel and the virtue of seeing things. He has done much of this truly kingly work himself, and has inspired his eldest son with a similar spirit. Now it is the turn of the Right Hon. Joseph Chamberlain to take regal exercise on a broader scale than railway journeys between London and Birmingham.

The Colonial Secretary—a man of will and ideas—must check his love for playing the part of Bombastes Furioso. Bombastes was created by a namesake of the Great Rhodes of Rhodesia. The Great Rhodes of Rhodesia was not allowed by destiny to show his full version of Bombastes, and Mr. Joseph Chamberlain will not be encouraged to take up and develop the part as Rhodes's chief understudy. He goes out as a representative of his King (and country), and the King will see that the fate of the colony is not imperilled by any pretensions that are not in harmony with sober—almost parochial—government. No boots will be hung up, no challenges issued as to their displacement; nothing will be done on "Afro's burning shore" that will not be carefully "edited," and, if need be, repudiated at head-quarters.

THE BOXER INDEMNITY.

For some time back, a movement has been noticeable in the American press against the burdening of China with a second load of indebtedness on account of exchange, the indemnity having been fixed in gold.

It would (says the *Shanghai Daily Press*) have been only fair to fix the amount in silver; for, at the present rate of progress, China may pay annual instalments for fifty years and then be owing more than at first. It is now reported that the U. S. Government has definitely proposed to the Powers to submit to The Hague Arbitration Court the question whether the amounts should be fixed in silver or gold. The following are the amounts:—

Russia	...	...	...	Tls. 130,371,120
Germany	...	...	...	90,070,515
France	...	...	...	70,878,240
Great Britain	...	...	...	45,712,795
Japan	...	...	...	34,793,100
United States	...	...	...	32,049,055
Italy	...	...	...	26,617,505
Belgium	...	...	...	8,485,345
Austro-Hungary	...	...	...	4,003,920
Netherlands	...	...	...	782,100
Sweden and Norway	...	...	...	212,490
Spain	...	...	...	135,315
Total	...	...	...	Tls. 450,000,000

SOME REMARKABLE FINDS OF GOLD NUGGETS.

It is generally supposed that Australia and California have a monopoly of big nuggets, but one of the biggest was found in the Ural Mountains, Russia, on November 7, 1842, at a depth of only nine feet. It weighed 96lbs., and was valued at £4,568 19s. 3d. A lucky find was the "Heron Nugget," turned up at Mount Alexander, Victoria, by couple of young Englishmen who had been only three months in Australia. They returned to England immediately and sold it for £4,080. Not the most valuable but one of the most beautiful in appearance, of Australian nuggets was the "Victorian," found in White Horse Gully, Bendigo. It was purchased by the Parliament of Victoria for £1,650 and presented to the late Queen Victoria. There is a monster nugget lying at the bottom of the Atlantic. It was shipped from San Domingo to the King of Spain 400 years ago as a tangible proof of the value of Columbus's discovery but was lost in a storm together with 30,000 ounces of smaller golden specimens.—*Octelst Empire*.

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Contributions.

The Editor solicits contributions on all topics of general interest, and in particular on subjects bearing on the commercial, industrial and economic condition of India. Contributions accepted and published will be duly paid for. It may be stated that a page of the Review takes in about 730 words.

All contributions, books for Review should be addressed to Mr. G. A. Natesan, Editor, The Indian Review, Esplanade, Madras.

Notice to Subscribers.

It is particularly requested that any change in the address of the subscribers may be early intimated. Complaints of non-receipt of particular issues of the Review received after the month to which they relate will not be attended to, and such, as well as old numbers of the Review will be charged for at eight annas a copy.

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NEW FEATURES.

We invite attention to several new features introduced into the *Indian Review* beginning with this number.

Under **Utterances of the Day** we have reproduced in full the Viceroy's Speech at the Delhi Durbar, H. H. the Aga Khan's Presidential address at the Mohamadan Educational Conference and Dr. Bhandarkar's address at the Indian National Social Conference. In the **Industrial and Commercial Section** will be found the full text of Lord Curzon's speech on the occasion of the opening of the Fine Arts Exhibition at Delhi. Among other subjects dealt with in this section may be mentioned those relating to Profit in Plantains, Uses of Cocoanut, Tanning industry of Madras, India—its Investments and Investors, the German Government and German Trade, Aid to the weavers of Salem, Importation of Enamelled Ironware, Cotton seed oil industry and Decline of Sericulture in India. In the **Educational Section** the subjects treated are:—Professor Ramsay on Universities in India, the Indian Institute of Science, Scheme for a Teaching University for Allahabad, Science in the school curriculum, the Teaching of arithmetic and Rewards and Punishments. The Departmental Notes (Legal, Medical, Science and General) have been retained.

It will thus be seen that the chief aim of the publishers of the *Indian Review* is to make the journal interesting and useful to all classes of readers.

TO OUR SUBSCRIBERS.

Those that enrolled themselves as subscribers to the *Indian Review* after August 1902 and those that may hereafter become subscribers to the Review will be presented with Portraits of His Majesty King Edward, Her Majesty Queen Alexandra, H. R. H. Prince of Wales and the late Queen Victoria on receipt of a half-anna postage stamp. To non-subscribers the portraits will be sold at two annas a copy.

Messrs G. A. Natesan & Co., Publishers of the *Indian Review* request that subscriptions to the Review for the current year may be paid as early as possible.

THE TIME OF THE WORLD.

§ AID Gerald Massey (Natural Genesis, II, 488)
 “At the end of this century the Vernal colure will pass (from Pisces) into the sign of Aquarius and the year 1901 will be the year 1 of the Waterman. At that date the Time of the World ought to be made astronomical once more.” Massey's date is based upon the assumed passing of the colure from Aries to Pisces in B. C. 255; each zodiac being accorded an interval of 2155 years. This would make an Equinoctial Precession of 25,860 years, which, though agreeable to modern computations, differed from Hipparchus, whose computation, ruled the Levantine world and furnished Massey with his basic data. Hipparchus gave 72 years to the degree, or 72×360 , 25,920 years to the Precession. According to Btennand's “Hindu Astronomy”, a similar determination of the Precession was made in India so early as the tenth century B. C. It therefore ruled not only the Levantine world; it ruled the Orient.

A Precession of 25,920 years gives to each of the 12 zodiacs 2,160 years. Hence, if Massey's starting point were correct, the Time of the World would begin anew in A. D. 1903 or 1904, instead of 1901. But the starting point itself is wrong. The defect in Massey's starting point, a defect that intrudes itself into all Western literature, is due to his unconsciousness that our *chronology had been altered*, not merely once, but on several occasions.

Everybody is familiar with the shifting of certain festivals and the alteration of ten days (now 12 days) made by Pope Gregory in 1582; but few people are aware of the far more serious alterations which were made previously. These alterations not only affect the astronomical Time of the World; they influence its past history. So far as it now appears the various alterations were as follows:—

I. If we accept the epoch of the zodiacs fixed by Godfrey Higgins (presently to be mentioned) Alexander the Great altered such epoch to the extent of 28 or 30 years, in order to bring the beginning of Pisces to the year of his Apotheosis.

Higgins' epoch of Pisces, is B. C. 380. The Apotheosis of Alexander took place in the Libyan Temple of Jupiter Ammon, December 25th, B. C. 322. In that temple he found Aries regnant: he left it with Pisces triumphant. He was afterwards known as Ichthys, the Fish, the Great Iskander, etc., titles that are connected with the zodiac of Pisces.

II. Julius Cæsar altered the Olympiads from five to four years each, and their starting point from a year equivalent to B. C. 884 to one equal to B. C. 776, an initial difference of 108 years. As to other periods the difference varied. In B. C. 343 there was no difference at all; for that year was Olym. CIX. 1, by both sets of Olympiads.

III. Augustus Cæsar altered the epochs of the Ludi Sæculares to the extent of 78 years. This changed the year of the Foundation of Rome from the equivalent of B. C. 816 to B. C. 738, and had a variable influence on other important dates.

IV. Some time before the 17th century the Latin Sacred College restored 15 years to the Roman calendar. As these years were inserted into that portion of the calendar which preceded the Christian era, it had the effect to remove the year of the foundation of Rome backward to B. C. 753, where it now stands. It also changed the Anno Augusti. A restoration of equal extent though not as to the same years, is imputed to the Greek Church in A. D. 1261.

To recapitulate Alexander altered the zodiacs; Julius Cæsar, the Olympiads; Augustus, the Ludi Sæculares and year of Rome; Pope Gregory VI or XIII (?) the Augustan era; and Gregory XIII, the New Year day and some other festivals perhaps also the year of the Nativity.

The net result of these various alterations shows a present difference between Oriental and Western chronologies of 63 years; that is, when both are computed from any certain astronomical event. But in given dates, especially the more remote ones, the difference amounts to the whole number of

years (namely 108) sunk by Julius Cæsar from the starting point of the Olympiads, plus the whole number of years (namely 78) sunk by Augustus from the Ludi Sæculares and the year of Rome. This extreme difference of 186 years appears upon a comparison of the Indian era of Liber Pater given by Pliny and the era of Iskander (Liber Pater) given in the Arabian Nights. Subtract one manvantara of Liber Pater, namely 532 years, from Pliny's era and add 186 years to the era of Iskander, and the two become almost exactly alike. Pliny's era, in terms of our calendar is B. C. 6777, less 532 years, makes B. C. 6,245. The Arabian era in terms of our calendar, is B. C. 6065. Add 186 years and the result is B. C. 6251. Both of them relate to the manvantaras of Dionysius or Liber Pater, of whom Alexander affected to regard himself as the reincarnation.

These conclusions and the evidences upon which they rest are exhibited at length in my "Worship of Augustus Cæsar," recently published by the Cambridge Press of New York. In the space allotted to a magazine article we can only deal with the subject briefly, leaving the reader to examine the evidences and illustrations in more elaborate works. Omitting from further view the alteration made by Alexander the Great, let us examine the alterations made by the Romans.

The Olympiads were called by the earlier Greeks Pentsters and by the earlier Romans quinquennales, both of which terms mean periods of five years, not four years. Many writers previous to the Augustan Age and some even during the Augustan Age, especially the poets, whose verses could not be so readily altered as prose writings—explicitly alluded to the Olympiads as periods of five years, the same as the Roman Lustra. For example, Ovid, who was at the time (as he tells us in another passage) fifty years old, writes that his age equalled just ten Olympiads. *Pontics*, IV, 6; *Tristia*, IV, 810; *Metam.* XIV, 324. This is tantamount to saying that each Olympiad was

equal to five years. That the Olympiads were anciently periods of five years is also established by the following authorities: Pindar, *Olymp.* III, 33; X, 67; *Nemea*, XI, 30; Josephus, *Wars*, I, XXI, 12; Martial, IV, 45, 3; Suetonius, *Nero*, 3.

The Olympiads were solemn festivals, kept with a political object; the sports and exercises being of a secondary or incidental character. The duration of the festival was five days, which were dedicated to Cronos, the type of Time. Its object was to appropriate—and by such appropriation to mark—the five surplus days, or epagomenæ, which constituted the difference between the ancient solar year of 360 days and the later solar or equable year of 365 days. In short, the Olympian festival was a monument of the Equable year, and, as such, it became a bulwark of Popular Liberty, against the insidious and always menacing device of a lunar year; menacing, because a lunar year subjected all contracts and other arrangements of time to the caprices of the priesthood. The Olympiad opened with sports, it closed with sacrifices; and its honours and rewards were the highest objects of Greek ambition.

Even when the lowering of the Olympian interval from five years to four years was accomplished in Rome, the five year interval continued to be observed in Greece, where it always retained its name of Olympiad. After a critical examination of this subject, Sir George Cornwall-Lewis declared, of the quadrennial cycle, or four-year Olympiad, employed by the Romans of the Augustan Age, that "there is no historical trace of its actual use in any Greek Calendar."

When Julius Cæsar established by the law of the Empire (this now included Greece) a solar year of 365½ days, the need for a quinquennial ceremonial lost its force. Confident that his institute of the Julian year would not be overthrown, the quinquennial festival was neglected, as having outlived its usefulness. Why continue to rejoice over the 365-day year of King Iphitus, when

Cæsar, who was a King of Kings, had safely anchored in the laws of the Empire a better and more perfect year of 365½ days? In his turn, and in his usual devious and prudent way, Augustus also shelved the quinquennial Olympiads, by depriving them of their religious character, ceremonial and support. Known in his reign as the "Cæsarian," the quinquennials were afterwards called the "Augustan" games; and, carrying out the plan of Julius Cæsar, he substituted in their place of honour, the quadrennial games, to which he transferred the familiar name of the Olympiads; coupling with them their ancient ceremonial, religious sacrifices and secular rewards. Thereafter, if not indeed before his reign the Olympiads became four-year intervals. They were reckoned no longer from Iphitus, B. C. 884; but from Coræbus, B. C. 776. They no longer celebrated a dead Charter of Liberty, but a living one, not a period of five epagomenæ, to be huddled into a short month (Cronia) every five years; but a living Charter of Liberty, a leap-year day, to be celebrated every fourth year for ever.

If, as asserted by Sir George Cornwall-Lewis, the Greeks never used a quadrennial cycle, it follows that all computations of time based upon the supposed use of such a cycle by the Greeks, are erroneous. Into this class of computations must fall not only the Year of Rome, but also many other events both real and imaginary.

We now turn to the alterations made by Augustus. According to the pre-Augustan authors, Rome was founded in the year corresponding with our B. C. 816. Timæus, who wrote during the fourth and third centuries B. C., is reported by Dionysius of Halicarnassus to have held that Rome was founded in the 38th year before the first Olympiad. The Olympiads employed and referred to by Dionysius Hal., (a post-Augustan writer,) were the four-year Olympiads commencing B. C. 776. Hence Rome was founded B. C. 814. Timæus, however added that it was founded in the same year as Carthage. This was the 40th year before the four-year

Olympiads, or B. C. 816. L. Cincius Alimentus, a Roman senator and historian who wrote during the third century B. C., said that Rome was founded in Olym. XII, 4. He evidently meant the five-year Olympiads, which began B. C. 884. Hence Rome was founded B. C. 826; possibly a mistake of ten years and meant for the equivalent of B. C. 816. Cato, about B. C. 200, said that Rome was founded 432 years after Troja Capta, which Herodotus evidently fixed in a year equivalent to our B. C. 1248. Hence Rome was founded B. C. 816. Cicero, who wrote his *Res Publica* about B. C. 45, says in two places that Rome was founded in a year equivalent to our B. C. 816; and this evidence is all the more valuable because these portions of the *Res Publica* were recovered in recent years from a palimpsest whose original text had apparently remained unaltered since it was written.

All these writers lived before the Augustan Age; and in any enquiry concerning the Time of the World, as kept down to that age, their evidence is of the highest worth. Contrariwise, the evidence of the Augustan and post-Augustan writers, when it differs on this subject, cannot be accepted as valid; because it is their own alterations, or their acquiescence in the alterations made by other Augustan writers, that is being called into question. It may, however, be worth observing that the chronology of Virgil's *Æneid* amply supports that of Timæus.

After Augustus re-established the Empire, which event occurred in our B. C. 27 or 28, the year of the foundation of Rome was officially altered to the quadrennial Olympiad IX, 2. An examination of the process followed by Augustus at once reveals his motive. This prince, with the world at his feet, proclaimed himself not merely a King of Kings, but a god upon earth; and as such, he demanded and received the worship of his subjects. Says Tacitus, *Annals*, I, x, : "The reverence due to the gods was no longer peculiar; Augustus claimed equal worship. Temples were

built and images were erected to him; a mortal man was adored; and priests and pontiffs were appointed to pay him impious homage."

The Ludi Sæculares were a series of religious games and a festival, observed every 110 years, an interval equal to one-sixth of the Divine Year, whose rites had found their way from the Orient into Etruria and thence had been imparted to the Romans. Its basis was the well-known Ecliptical Cycle, and its recurrence was always expected to synchronise with some prodigy or marvel of a supernatural character. In order to fulfil the Sibylline prophecies, lend colour to his divine pretensions, and support his assumed role of "the second Romulus, or Quirinus," it was deemed necessary by Augustus to make his Apotheosis synchronise with the Ludi Sæculares but as these were yet 78 years distant, he sank this number of years from the calendar, and thus brought the day of his Apotheosis and the celebration of the Ludi Sæculares to the same point of time. By the present chronology this was April 21st. B. C. 15.

In the chronology of the old Commonwealth the Ludi Sæculares were computed from the birth of Romulus, which synchronised with the foundation of Rome. After the foundation was removed from B. C. 816 to 738, the Ludi Sæculares were reckoned no longer from the birth, but from the Apotheosis of Romulus. This was attached to his 33rd year; hence, the first Ludi fell in A. U. 78 and the others at intervals of 110 years thereafter, bringing the Augustan Ludi to A. U. 738. The Emperor Claudius afterwards endeavoured to undo this work by celebrating the succeeding Lud^{us} in their proper year; and some of the same men who had danced in the Augustan Ludi also danced in the Claudian, which, had the Ludi been observed 110 years apart, would have been impossible; but the sanctity and universal reverence entertained by the people for Augustus, caused the intervals which the latter had fixed for the Ludi to prevail over this and every other attempt to change them.

There are three eras employed in the monuments relating to Augustus. First, that of his advent which (now) answers to our B. C. 40; Second, that of the Empire, which answers to our B.C. 27 or 28; and Third, that of his Apotheosis, which answers to our B. C. 15. There is also an Egyptian Augustan era; but it is not necessary to discuss it in this place.

Had the calendar, as arranged by Augustus, remained unaltered to the present day, his Apotheosis would have answered to our A. D. 0., or the year before A. D. 1; but owing to the 15 years shifting already alluded to, his Apotheosis now bears the date of B. C. 15. The ceremony, showing his ascension to Heaven and reception by Jupiter, is represented on the celebrated Cameo (said to be the largest in the world) presented by the Latin emperor Baldwin II to Louis IX of France and now in the Museum of the Loure. A coloured fac-simile of it appears in Duruy's "History of Rome."

The introduction of the Christian era as a measure of time resulted in throwing all ancient dates into confusion. This was due to several circumstances. I. It was not an era, like the year of the world, or like Scaliger's astronomical era, which antedated all historical epochs and ran on continuously from its own year to an endless succession of years. On the contrary, the Christian era is used both backward and forward; and as no allowance is made in it for a year between A. D. 1 and B. C. 1 it makes a difference of one year as between itself and every era more ancient than itself. II. As it took its starting point from the Roman era, more especially the *Æra Augusti*, it embraced all the chronological alterations which that era embraced. III. In correcting vitiated dates, the same number of years must be deducted from "A. D." dates which have to be added to "B. C." dates. This is a source of endless confusion. IV. As before stated, it was itself altered to the extent of 15 years. Its use therefore involves three classes

of errors, viz., the ancient alterations as between the Olympiads and the year of Rome; the single year between A.D. 1 and B.C. 1; and the 15-year alteration of the Middle Ages. The 10-day alteration of Gregory is omitted from view as relatively unimportant.

Such, generally, being the case, it is no cause for wonder that Scaliger and Massey—and in fact astronomers and chronologers generally—have repeatedly advocated a reform in the present method of computing time.

We now turn to the 15-year alteration. The Christian era was not employed anywhere previous to the eighth century if so soon it is said to have been computed by a monk called Dionysius Exiguus, (the little), in the year 524, but for several reasons, this is doubtful. The epoch of this Dionysius, or of his pretended computations, has never been proved. All we know is, that the year of the Nativity of Christ in the corresponding year of Augustus, or in the regnal years of the emperors is said to have been announced in Rome by Pope Hadrian, A. D. 781, and it is alleged to have appeared in a charter of Charles the Bald, the expression being, "in the year of our Lord, 879." But so far was the Christian era, as such, from being generally adopted, that the Advent era of Augustus (our B. C. 40) sometimes called the Spanish era, was commonly used in Africa, Spain, Portugal and Southern France, so late as the fifteenth century. The abbreviation "A. D." does not necessarily mean in the year of our Lord Jesus Christ. It formerly meant in the year of our Lord Augustus, of which the word "era" is itself a proof; this word being composed of the abbreviations A. E. B. A., Anno Erat Augusti, or the Apotheosis year of Augustus. "A. D." being an abbreviation common to the years both of Augustus and Christ, and there being even now only 15 years difference between them, it is difficult to always distinguish one from the other. Especially was this the case during the Middle Ages, when there was, in fact, no difference

between them; such difference having been created during or since that period.

Proofs of the 15-year alteration appear on the dated coins of the emperors, from Nerva to Alexander Severus, all of which are 15 years out of harmony with our chronology. The coins of Geta and Diadumenianus, each of whom reigned but a single year are conclusive on this subject.

Another proof of this alteration appears in the Canon of Nicephorus. If we accept the charter of Charles the Bald as having been couched in the Latin era of Christ, it follows that the difference of 15 years between the Latin era of Christ (which last was observed in Constantinople down to the year of its fall and in the Greek colonies in Russia and else where down to still later dates) was created before the writing of that charter. Be this as it may, it remains a fact that the Apotheosis year of Augustus was in Russia taken for the year of the Nativity of Christ down to comparatively recent period, when it was quietly and unobtrusively changed by introducing 15 years between them.

The 15 years restored to the calendar by the Latin College were placed *en bloc* between the eras of Augustus and Christ; whilst the 15 years restored by Nicephorus for the Greek College were distributed to as many regnal periods between the deaths of Augustus and Justin II. The details are given in Del Mar's work, above cited, page 68. The difference between the Anno Mundi of Constantinople, 5509, as used in the Ecloga of Leo III., and the older Anno Mundi of Antioch, 5493, employed by the soi-distant "Theophanes," or as Bury prefers to call him "Pandorus, the Egyptian," which difference is 16 years, indicated that the original restoration, or restorations, embraced this number of years (to wit, ten and six) and that one year was subsequently sunk. The sinking of this year (A. D. 774) is noticed by Bury in his "Later Roman Empire," but not the additions of 16 years, or 15 years, as the case might be.

The Anno Mundi or year of the world of Constantinople, as it now stands, is B. C. 5508, and of Antioch 5493. The epoch of the latter is August 29th, which is the Ascension day both of Augustus Cæsar and "Saint Augustine."

The alteration of the Olympiads by Julius Cæsar has obliged historians to invent doubles to almost every prominent name of antiquity. For example, we have two each of the following names: Zoroaster, Crito, Simonides, Eudoxus, Artemidorus, Posidonius and Timæus, besides numerous others; whereas it is evident that in many instances, both Persian, Greek and Roman, only one such person was known to fame: the other is a myth, born of a shifted and perverted chronology.

The alteration in the year of Rome made by Augustus has given rise to another class of historical problems. For example, *Tacitus, Annals*, XV, 41, explicitly says that the interval of time between the Foundation of Rome and the Burning by the Gauls was precisely the same as that between the Burning by the Gauls and the Conflagration in the time of Nero. According to our present chronology, the foundation was in B. C. 753, and the Burning by the Gauls in B. C. 384. This is an interval of 369 years. From the Burning by the Gauls to the Conflagration in the reign of Nero, July, A. D. 64, is 447 full years and a fraction. Deduct 369 from 447 and the quotient is 78 years, which measures the excess of the later over the earlier period. Tacitus says that in fact, the two periods were exactly equal, and Tacitus was a highly accomplished and very careful writer, himself a member of the Quindecimviral College. Our chronology makes one of the periods longer than the other by 78 years. The conclusion is inevitable that these are the 78 years which Augustus sank from the chronology of Rome.

Pausanias, *Itinerary*, I, 379 (ed. Taylor) says that the Third Age of Greece began in (the quadrennial) Olym. XXIII, 4, answering to our B. C. 685. But the Third Age was in fact, the

era of Phoroneus and Nabonassar B. C. 784 ; a difference of 63 years. These are the 78 years sunk by Augustus, less than the 15 years since restored ; a proof, that the dates in Pausanias, a writer of the second century, have been " revised " in Rome. This has also been the fate of Pliny, Strabo, Censorinus and numerous other Roman and Greek texts.

According to our chronology, Attius, the comic poet was born B. C. 170 ; yet it was deemed strange that he refused to rise from his seat in the College of Poets upon the entrance of Julius Cæsar, about B. C. 50, when, if our chronology is correct, Attius must have been long since dead ! And how can we reconcile our dates with the assertion of Cicero, who in his *Brutus*, written in B. C. 45, declares that he consulted this same Attius concerning the merits of that work.

Catullus the poet died, says Eusebius, in A. U. 696 ; others say A. U. 705 ; yet Cicero records that Catullus' Satire upon Cæsar and Mamurra was newly written in A. U. 708, when Cæsar rewarded the poet for it with a supper ! If both Eusebius the Christian Bishop and Cicero the pagan consul, are correct in their dates, Cæsar must have supped with a ghost ! In short, the confusion of dates due to the alteration of the calendar is so great, that every attempt to construct a chronology of the lives of Julius, or, of Augustus Cæsar has met with failure, and the faithful Pliny has been unjustly condemned in the following curt sentence of Alexandre, the ecclesiastical critic : " Desperandum est de Pliniana chronologia."

Having thus traced the vicissitudes of our calendar as shown in Scaliger, Eckel, Bury and Del Mar,* especially in the last named work, we recur to the astronomical Time of the World fixed by Massey.

Whence did he deduce the year B. C. 255 as that of the termination of one zodiac and the commencement of another ? The zodiacs do not coincide with the actual constellations in the sky. Therefore to connect them with a given astrono-

mical date has no warrant in nature. The dates assigned to the zodiacs can only belong to art and that art can only be astrology. From what astrological event, real or imaginary, did Massey deduce his date ? We know of but one ; one that was also known, or assumed, by astrologers of the date mentioned. That one was the assumed passage of the Vernal Equinox from Taurus to Aries, which Rawlinson, with the texts of Aristotle and Callisthenes and the baked tablets of Chaldea before him, fixed in B. C. 2234 and Higgins (Anacal, I. 251) in B. C. 2520, or (Anacal, I. 194) in B. C. 2540. If we were permitted to add the 186 years sunk from the calendar by Julius and Augustus, Rawlinson's date as corrected, would be B. C. 2420, for the beginning of Aries. This corrected would fix the beginning of Pisces in B. C. 260, and the beginning of Aquarius, or the Waterman, in A. D. 1900 or 1901. This, then, instead of 1903 would be the appropriate period for correcting the Time of the World. Nevertheless, it is not a true date ; but an altered one. The true date of Aquarius being past and gone.

A correction of the World's Time need not involve any alteration of the present era ; that must be regarded as quite out of question. But unless we have the presumption to regard our civilization as something apart from and unconnected with history, we must concede that the truth demands of us an examination and—if found necessary—a rectification of ancient historical dates. If these are wrong, we cannot too soon correct them. It may conform to a present convenience to avoid facing an awkward truth, but such avoidance can only be indulged at a moral cost that must far outweigh all the advantages of expediency. The natural harmonies that surround us on all sides continually proclaim the oneness of truth. They declare that mankind, so long as it disobeys or neglects a single one of its requirements, can hope for no permanent progress in the path of improvement. Its time will count for nothing ; its work will be in vain ; its aspirations will sink into oblivion. In the niche of immortality there is room only for the image of Truth ; the truth that is One and Indivisible.

ALEXANDER DEL MAR.

THE HINDU SOVEREIGN AS PARENT OF HIS PEOPLE.

THE idea of a constitutional monarchy is in the West a matter of comparatively recent growth, and the king's person is under that system merged in that of the constitution which may include the people as the voters or electors or the like to a smaller or greater extent. The idea of a sovereign under ancient Hinduism was that of a *parens patrie* as Western lawyers would call him by a fiction. To the Hindu mind it was a living fact, whether it was the mind of the subject or of the sovereign that entertained the idea. He is the Ma' Bap of the people in British India even to-day so far as their own impression is concerned, whatever he himself thinks of it and whatever the impression of Englishmen and educated Indians. That means that he is a fraction of the political family and his individuality is merged in his parental character. The parentship of the parent by naturalties in the West becomes quiescent and fades into a fiction of the memory as soon as the child becomes an adult and sets up his or her separate home. To the Hindu son the home ever remains the home of the parent, and a Hindu daughter passes from the home of a parent to that of a parent-in-law. The idea of a parent and family is indelible in the Hindu mind and adheres to it even when it is the political parent and family that is thought of. The individualistic notion is under this system as much foreign to the royal palace as it is to the private hearth.

The individual has at no times been the unit of Hindu society, but has only formed a fraction of the family as Sir Henry Maine has so rightly pointed out. The family remained our unit whether the castes were four or forty thousand or were destroyed altogether as under Buddhism; and in spite of all incentives supplied by our usual circumstances or extraordinary incidents of political vicissitudes, our individual has only served to form

a fraction of the integral family which has always withstood all intrinsic and extrinsic attempts to mutilate it whether by asking its widows to remarry or by asking the Madras Government to change the relative positions of self-acquired and ancestral property by a "Gains of Science Bill." These have been felt by the family to be matters which alter the constitution of its individual fractions, and orthodox minds unable to give a clear expression to their complicate instincts have resisted such alterations and attempted to use arguments and quotations to repel attacks rather than in order to weigh the *pros* and *cons* of proposed reforms with analytical genius.

The family has in its turn formed a unit of the tribe, taking tribe to mean that form of social organism to which Sir Henry Maine referred when he distinguished between tribal and territorial sovereignties. The ancient idea of politics was that of a sovereign of a tribe and not of the sovereign of a territory. The latter idea was comparatively of a later growth. We had in India the Aryas, the Dasyus, the Rakshasas and so on instead of the *natives* of particular places before we had the sovereigns of particular states in a settled condition. The Aryans and non-Aryans were not by nature immiscible in India, for, as noted in my contribution to *East and West* for Vol. 1, Nos. 2, 3 and 4, on our Ancient Marriage Forms, they freely intermarried at one time. The Aryans were the tribe of which the castes were sub-divisions. After the fusion of the Aryans and non-Aryans into a political integer, these two fractions settled upon common areas of land or territory, and the kings claimed to be the heads, not of the Aryans only or of their four castes, but of the whole people or of the Pancha-janas i. e., of the five tribes of which the non-Aryans formed the fifth tribe in addition to the four castes in the different kingdoms. This phase of the "five tribes" as meaning the whole of a people is still preserved by some of the Vernaculars in the expression "Pancha-

meaning an arbitrator or people generally, the two meanings of the word being associated in the proverb "The voice of the Pancha is the voice of God"—the "*Vox populi vox dei*" of the West.

To the Indian mind it has seemed more consistent with tradition and intelligence to call the king the ruler of his animate subjects including even cows than of inanimate landed territory. Even when his name came to be associated with his territory, it became usual to speak of the country ruled by one particular dynasty as being such and such 'countries' in the plural; thus the country Dasarna was called Dasarnas and Videha was called Videhas. By a kind of metonymy the whole living population of a country was thus referred to by speaking of the country in the plural. "Desapala" or the protector of the Desa or country was only an officer of the state, while the king was Nri-pala or Narapati i. e., "Protector of Men," and so he is now. Even when the king is Bhu-pati or the like, the older idea is not that of his being the protector of this or that limited country or its lands as property, but of the unlimited earth teeming with its animate population. For in the same breath that this word is predicated of a king, it is also predicated of the God Siva, otherwise called Pasu-Pati or Bhutapati or the lord of all living animals. The transition from a king of all souls on earth to a king of the earth itself is easy to understand, and nothing short of it can account for rulers of limited and fractional provinces, however petty, coming in course of time to be called rulers of the whole earth. As the Grihapati was the *pater familias*, the Narapati was the *pater populi*—a tribal entity.

Whether in politics or in economics or in social matters, the ideal king or the king true to his name was thus the protector or parent of the people or of the sumtotal of the tribes whether they were four or five or, as in modern India, innumerable. The social, political, and econo-

mical welfare of the individual was secured by looking after the welfare of the family, the welfare of the family was secured by making its interest subservient to those of the various tribes or castes including them, and the whole nation was taken to be doing well when the respective tribes were minding their own functions without intermeddling with those of others. A king's business was thus to inquire of his people whether they were doing their Dharma—their functions—without being interfered with. Thus Rama felt called upon to inflict the penalty of death upon the Sudra who was practising Brahmanical austerities. Similarly and without partiality, though it was sinful in a king to hang a Brahmana, it was only righteous to kill the great Brahmanā Drona when he went out of his way and took up arms as a commander of the army of the Kauravas and used them against Kshatriyas who, and not he, were minding their legitimate business of fighting. The Brahmana poet Vyasa put these words in the mouth of one who belonged to the righteous side. The righteous function of the king was to see that every factor of the nation minded its own business and was assisted by himself in doing so. This is the keystone of the political as well as the economical ideal of Hinduism. "Let every one mind his own functions or Dharma as assigned to him by his birth and situation in life," was one of the Twelve Tables of the ideal Hindu State, and we shall try to have a bird's eye view of the politics and economics of Hinduism as influenced by this way of looking at national life.

The almighty dollar, as the Americans call it, is the be-all and end-all of at least modern economics which would even subordinate ethics to its own ends and make it immoral on the part of any individual to abstain from at least earning his own bread. Nobody, according to this code, has a right to live unless he does his duty in this direction, and an able-bodied beggar is a drone whom Western ethics commits to the custody of the police. Quite different is the view of Hinduism

and even of all Oriental ethics which 'makes it the duty of the rich to distribute alms even to able-bodied men under certain conditions. The Hindu king presuming to touch the bodies of these beggars would be exceeding his functions if not quite be committing a sin.

Political ethics in the West confines the duty of the sovereign towards individuals to enforcing their rights against one another, while it leaves them at liberty to adjust their reciprocal relations by natural evolution and without any political compulsion. Hindu ethics adds to the sovereign's duties the duty of regulating these relations and of using his power to prevent their evolution from drifting into hands other than those of the most gifted minds such as the authors of the *Sāstras* were presumed to be. And the righteous king, in old Hinduism, was he who did not stain his hands with any encroachment upon the privileges of those minds. As *pater familias* he managed the political family and looked after the conservation of his and their functions which, however, it was the function of these minds to define.

The post-Vedic legend of the punishment meted out to king Trisanku for aspiring to higher spheres than those adjudged by his royal priest Vasistha is an illustration in this direction. The ideal character of Rama on the other hand is that of one who advised his mother to stay with her husband as a matter of duty, declined to assist his father in not keeping his (the father's) promise of banishing himself (Rama), waited for nobody's permission before he undertook to allow Sita to follow him to the forest in the performance of her duty as his wife, killed the Sudra who performed austerities meant to be confined to the *Dvijas*, and banished his innocent dearest Sita in spite of his conviction as to her innocence because he had to regulate his household according to the judgments of his people and not of himself obviously on the ground that a man ought not to be a judge in his own case. In each of these cases he was

carrying out the behests of the *Sāstras* by applying them practically whether he had to apply them as a member of the patriarchal family or as its head or as the sovereign of the tribes and entrusted by Providence with the function of seeing that every factor of the state including himself performed the function assigned to it by the *Sāstras*. His treatment of the Brahmana Avatara Parasurama when he made this great arm-bearing Brahmana leave the earth as an exile, has its ideal side in this that, without killing him, he compelled the divine Brahmana to confine himself to his functions and to realize where he was bound to stay his hands. Again, the judgment of King Bali went against the most pious King Yudhishtira when the latter inquired what punishment a Brahmana guilty of theft at his royal sacrifice could be visited with. Bali replied that, by the laws of his Yuga, it was Yudhishtira who deserved punishment, as his liberality had fallen short of his ideal and had allowed, in the Brahmana's heart, room for such an impious craving; for the King's liberality ought to be such that one entitled to beg should not be tempted to steal. That is just the charge to which a parent lays himself open when he allows the child to drift into waywardness.

These illustrations will tend to show that under the ethics and polity of Hinduism the duty of earning money or of not begging is deliberately removed from the lot of some of the components of the tribal nation, that economical principles are subordinated to other considerations of the social well-being of the nation, and that this well-being is secured by defining the sphere of every individual's functions by the process of sorting the whole nation into its compartments of the four tribes or castes according to Guna-Karma-Vibhaga as the Gita says or according to their "aptitudes and callings" as we might paraphrase the expression. The sovereign's own person had to submit to its own assigned sphere of functions under these considerations of social well-being.

and he was righteous or not according as he kept within or exceeded such sphere.

It is because the Guna-Karma-Vibhaga came at its inception to be laid out and developed on the lines of family distributions that Hinduism does not compel everybody to earn by his labour but leaves it to the Vaisyas to earn, to the Brahmanas to learn, to the Kshatriyas to rule, and to the Sudras to look to our arts and industries and not merely to serve as in the post-Vedic days. The sovereign true to this spirit of Hinduism is he who sees that all these factors of the nation do their work so assigned to them and develop their faculties by hereditary development and that this course of national welfare is not disturbed by those being compelled to earn that have, like the ladies of the family, the privilege of doing without earning and are charged with the duty of constructing and modifying the Śāstras that must guide the people. The King is only the fatherly gardener of these plants.

A strong illustration of the departure from these grooves has been offered during the famine relief operations and by the ways in which Government has looked at the exigencies of the people in considering the questions of remissions of assessment and the like. The relief works have done great good, no doubt; but neither the cultivator, nor the sowcar, nor the artist, nor the Brahmin would go there and therefore has served to swell the famine mortality figures. I have heard several cultivators remark that Government have fed and kept alive the thieving classes and starved the honest ones. Quite different was the state of things in some of the orthodox native states where the old chiefs opened up their granaries, which had been stored up with paternal care in better times, and distributed the contents free to all their "Prajā" which means subjects as well as children.

Not less savouring of the joint family instincts are the ideals of our classical politics. Kalidasa made his King breathe freely and seek his rest only after "looking after his subjects as his children." The same king Dushyanta, the hero of his *Sakuntala*, proclaimed it by beat of drum to his subjects that "He, "Dushyanta, offered to be a substitute to his subjects for each and every loving relative lost by

"them." In another drama, the *Chanda-Kausika* the hero, a fallen King, being invited by the Gods to enter Heaven alive in reward for his sufferings and virtues, refused to accept the invitation unless and until that same invitation was also extended to his poor subjects. And he added that if his religious merits were enough to secure Heaven while those of his subjects were not, he could part with his own merits and transfer them to make up those of his subjects. He would not enjoy the blessings of heaven alone but would prefer that, if not jointly with himself, his subjects should have them to his exclusion rather than he to theirs. This is an ideal of political joint family, and the king as the sole earning member and head of it would not taste the fruits of his best earnings but would either share them with them or even give over everything that he had earned.

The keystone to the economics and politics of Hinduism has thus ever consisted of the joint family relations and affections, whether it be in the small domestic circle or in the tribal elements of higher politics. The king had a double family. One was that which consisted of his personal relatives, and the other was that which constituted him the Nara-pati or the Protector of men. When the interests of the two families clashed, it was the smaller family that was to be sacrificed. So in the purer Yuga did Rama sacrifice his dear Sita. So, in the corrupt Yuga, was the blind Dhritarashtra (literally, holder of the political reins) advised in the first instance by Vyasa, the great Sage, to sacrifice his newly born son Duryodhana in the interest of his Dharma; so was he a second time advised by the great Krishna at the beginning of the great war. He could not make up his mind for the sacrifice, and was visited by Providence with the dreadful penalty of having to live long enough to see and suffer the destruction of all his beloved sons and their glory, and to survive as the guest of their enemies amidst insults and ill-treatment. Sovereigns by the law of the Kurukshetra are not the parents of the issue of their loins but of their subjects; Dharma and not they are the final sovereigns there. Such is the constitution as laid down by the Sages of the land, and any violation of that constitution will in the fulness of time, recoil upon those who are guilty of it. Then will the Dhritarashtra of the land be rudely awakened and ruthlessly ruined by the evolution of their own blindness to the fact that sovereignty is finally vested in Dharma alone as the Protector of the People. Such is one of the great morals preached by the *Mahabharata* to sovereigns of the land where it was written and is still sung.

G. M. TRIPATHI.

ENGLAND AND INDIA. *

"The noble wish always cherished by the Brahmins
 "For the freedom of their theocratic country
 "From all foreign domination can only be realised by them
 "When regenerated by positivism,"

Auguste Comte, Positive Politics Vol. IV Chapter V.

Our attention during the late visit of our co-religionist, *Henry Cotton*, having been directed to the condition and prospects of the country in which he has played so eminent a part as a Statesman, it seemed not unnatural for us to consider the relations of England and India from what I may perhaps call a more directly Positivist standpoint than that apparently taken up by our brother.

I say *apparently*, for I would by no means imply that there was in either of the two addresses to which we were privileged to listen one syllable which in the slightest way conflicted with the principles of our faith. Quite the contrary.

It was simply that he stated the facts and left his hearers to draw the conclusions whilst I would propose this evening somewhat to reverse the process and see how the facts which he laid before us go to illustrate the soundness of the views put forward by our master and held by his followers.

It is only occasionally that we find occasion to enter on questions of politics even of the most general kind—and from the largest consideration, but we must not by any means thence conclude that the Church of Humanity forfeits the claim, which in truth belongs to the meanest citizen, of considering the rights and wrongs of any large questions of national or international policy. It may fall within the province of the Statesman to apply principles to action, but no one of us can, and least of all will the Church, as she is gradually formed, be able, to get rid of the responsibility of forming, and, when need be, of expressing an opinion on the general policy of the nation to which we belong, as that policy takes shape in the action of those to whose care the national destinies are entrusted.

The honour and good name of England is dear to us. We would not see her fame be fouled in the interests of any class however influential, or sacrificed to the ambition of the proudest Statesman.

The priest of Humanity will be eminently a theoretician. He will deal with principles. Details do not fall within his province; he will leave them to the Statesman—the man of practice. But whilst he recognises that these details are outside his province nothing will seem to him com-

mon or unclean—the Church of Humanity can exclude no subject from the pulpit which touches the welfare of any of the children of Humanity.

In this little place it has always been held our first duty to try to make ourselves familiar with the main principles of Positivism. Once grasp these principles firmly and there should be no insuperable difficulty in their application to any special case; at all events we are more likely to go right when we have some principle wherefrom to start in guiding our opinions.

But upon occasion it is desirable to show that Positivism can do more than merely deal with abstractions, with high and dry questions of philosophy, or even with the main principles of religion—it is well to show how it can take up the questions of actual life, public as well as private, and supply the key to the urgent problems pressing upon us for solution.

Meanwhile we must not lose sight of our principles and those which I should wish you to bear in mind this evening, as we proceed in our subject, are first—the necessary subordination of politics to morals, and, secondly, the rule of public life that it is the duty of the strong to protect the weak in return for the trust and respect which the weak entertain towards them.

The English possessions in India were formerly under the rule of the East India Company—then and even now known to the natives of India as "John Company." It was under the rule of the Company that the main part of our Empire in India was acquired and it was against the rule of the Company—nominally at least—that India or the Company's Sepoy Troops revolted in the famous Mutiny of 1857.

It was only after the quelling of the Mutiny, that is between 40 & 50 years ago, that India became directly a possession of the English Nation, and that the English Nation became directly responsible for the administration of its affairs.

At the same time, we must not overlook the fact that the Company was a creature of the English Government by whom in old days important trade monopolies had been given to it, and we must further remember that the English Government always had the power of limiting its operations or even of closing its career, as it finally did when subsequent to the Mutiny the Indian Empire was made formally and directly subject to the English Government and the Company's powers were transferred to a special Government Department under the superintendence of the Secretary of State for India.

Like other of our possessions then the acquisition of India has upon the surface been rather forced

* An Address delivered at the Church of Humanity, Liverpool on 9th November 1902.

upon us than taken up designedly—or as part of any general policy. It might seem almost an affair of chance.

But to us chance only means the sum of those laws of which we are ignorant, and if we look a little deeper into things we shall find that in the case of India, as elsewhere, the rule of the British aristocracy has all along been directed towards two main points—first the desire to stave off reform, or rather re-organisation, at home by foreign conquest and colonization, and, secondly, the endeavour to find employment abroad for the superfluous members of its own and of the professional class who might otherwise give trouble at home.

The first reason really covers the second, as it is mainly among the unemployed members of the upper classes that leaders would be found to give expression—as we see in Russia and Germany to popular discontent. You will, therefore, see that the gradual development of the English Empire is by no means a thing of chance, but has been the consequence of a steady course of policy dating back as Comte reminds us to the days of the unjustifiable wars of England against France, nearly 500 years ago. From this line of policy the English governing classes have never swerved. This is what history teaches us.

And I cannot but ask you to note in passing the more than close resemblance between the methods adopted in India and those which have obtained in Ireland. In both cases native manufactures have been resolutely stamped out—though by rather different processes—in the interest of the dominant race; in both alike the fruits gathered from the soil by the toil of the labourers have been harvested into the pockets of absentees.

And we are asked to ascribe such things to chance rather than policy! As well ascribe the ebb and flow of the Mersey to chance; the only real difference is that political circumstances are more modifiable than the set of the tides.

Note, moreover, that the considerations which led originally to the adoption of this line of policy in the past are just as pressing now as ever they were; perhaps they are even more pressing as the difficulties at home become greater. These considerations still constitute the cause of our desire to maintain and develop our huge and unwieldy Empire, and the so-called patriotism of to-day—well designated as the disease of “*Maiekitis*”—is the outcome of the manipulation of our politicians and their hirelings of the press and the pulpit, who, as it were, inoculate, or rather “*noculate*” us with the venom of the Governing Class. What an evidence we have of the real feelings of our people towards the Empire in that apathy, of

which we were reminded so forcibly last Sunday, which is entertained towards all questions bearing on the welfare of our Empire or our Colonies and this most especially in London—the focus of bastard imperialism. People are only too willing to close their eyes to the dangers of the road along which they are being urged.

I have no wish to take up the role of mere obstructionist or critic—but for all that it is necessary to see the true state of the case and not be led away by mere idle declamation.

If the net result of English rule in India is the growing alienation of one race from the other, and the loss of 15 million lives by starvation in less than half a century, it needs some pretty strong arguments to justify its continuance.

The true view of the English situation in India was given us by Comte 50 years ago, and the results of every year of the intervening period have gone to show its exactitude. Yet the 50 years of English rule which have intervened have been insufficient to convince the English people that English domination is not consistent with the true welfare of India—that it is in truth an impossibility and can have only one ultimate issue.

And why is this but that—sugar over the fact as we may—our rule in India was not undertaken nor has been carried on with reference to the welfare of India, but in the supposed interests of England or of its ruling class.

We are blinded to the truth by our prejudices—the idols which we are taught to bow down to and worship. Yet what a terrible responsibility we have undertaken, and with how light a heart. Consider the nature of the case. It is absolutely appalling in its simplicity.

I can add nothing to the facts which were laid before you at the meeting at the Picton Hall. Nor have I any wish to do so. For in spite of the calmness with which we were addressed, a calmness one could hardly sufficiently admire when one appreciated the depth of feeling which underlay it, (what a disciplined nature it revealed,) the fact as they slowly accumulated seemed to me to constitute the most damning indictment that I have ever heard against our rule and to show the utter hopelessness of any amendment in its method or results.

And this not from the lips of some harebrained young anarchist, but from an official of high standing whose head has grown grey in the service, whom the powers that we have decorated for his merits—the favourite of the people under his charge—the man who from intellectual capacity and social antecedents is probably more competent to speak on this question than any other living being—the man whose fault, we are told, is that—

"He sympathised too deeply with the
"People over whom he ruled."

Could man wish a nobler epitaph than that? For is not sympathy requisite for a sound judgment on even the simplest proposition? The Government, it seems, has yet to learn the most elementary rule of logic. And we are content to stand by whilst men dare to talk of "awful natural calamities," we who are living in luxury upon the natural support of India's famished millions.

But I will not trust myself to speak of that. I prefer to pass to what I may call the second act of the drama, the subject on which last Sunday's discourse turned—that is, the underlying tendency of the world's large political aggregates or empires to break up into their constituent parts as autonomous or semi-independent or Confederate States or Provinces.

You heard on that occasion some of the facts of the world around us which go to justify the Positive opinions on this head, and others might be added were it necessary to accumulate proofs. But it is not necessary. Positivism teaches us that the sole reason for the existence of these vast empires or kingdoms will cease when the Church of Humanity has bound all the peoples together in a bond of fraternal union,—of faith and love.

This being so, we may be sure that we shall see everywhere traces of the tendency towards disruption, especially in those cases where the forcible union has been most resented. Comte foretold the separation of Ireland from England—that prophecy has not yet been fulfilled, but are not the two nations more and more separated every day although Ireland is still held by an English garrison?

Again we were invited—and we should do well to accept the invitation—to make ourselves acquainted with the real relations subsisting between England and India. We should do well to make ourselves masters of Comte's views on the question as well as with the writings of Dr. Congreve and others of his followers. We should remember that these questions are not new to Positivists. Amongst others I may mention the writings of the eminent Hindoo Positivist—lately dead—Jogendra Chandra Ghosh—of whose life and works you heard in this place a few months ago.

They all tell the same tale, and it is a tale which is certainly of a nature to make us feel most keenly the difficulties of the task in which we are involved.

But the difficulty of the problem is much increased by what we may call the dual government of India—that is by the supervision of the local officials by the Home Government. Granted that the officials in India were purely animated by the desire to benefit India, and that they

were duly qualified for their task—they are continually met and hampered by the exigencies of the Home Government. Where the interests of the two clash—how can it be but that the weakest will go to the wall? India has in truth been largely used as a convenience to England.

Another difficulty arises from the frequent change of officials both at home and abroad. This renders any settled policy far more difficult. This is true with regard to all the ranks of the English officials in India from highest to lowest. Men do not make India their home, even as much as they used to; they are further removed in knowledge and even in sympathy from the Indians.

Add these two facts together—first that England seeks her own ends in India, and secondly that her officials are daily growing more and more incapable of understanding or sympathising with the population they govern, and you have reason to account for the impossibility of a satisfactory government of India by England.

No doubt, freer hand allowed to the officials in India might do much, but what is the prospect of this being granted so long as the present policy of England is maintained. And yet—if we might suppose, an awakening, under a religious inspiration, of the conscience of the nation to its sins and omissions in the past and present—to a determination to do its duty in the future—might we but start with this assumption there need be no insuperable difficulty in the solution of the problem of India.

Let us, if only as in a dream, put ourselves in that position and judge whether the problem might not be worked out. It is a bold attempt you say. None the less let us try it. It can be at the best, a rough sketch. The final end must be the termination of British domination in India after substituting for it an efficient Native Administration. The method of approaching this end consists in giving India a larger and larger share of autonomy or home rule.

Our instruments to effect this will be found in the Brahman or Sacerdotal Caste. This caste has been through all the past the guiding force in India—and it is to their hands that the guidance of India will ultimately fall.

Hence, we shall put away as far more likely to mar than to help the process those Indians who have become imbued with the revolutionary ideas of Western Europe—and have abandoned their own religion, manners and country without really becoming Westerners. We shall rather look among those Indians who have remained most steadfast to their own traditions to assist us in the government of the country. Such men will in the main be drawn from the Brahman Caste.

So long as the present material drain upon India's resources last, it is difficult to hope for improvement, and we are driven to suppose—dream if you will—for remember we are only dreaming that England takes on her own shoulders payment of the Indian pension list. After all what would it be to the waste on Military and Naval establishments largely kept up to retain our hold on India?

Grant this and next let us imagine the appointment for the whole of his active life of a Governor-General of India, with powers only limited by his removal by vote of the English Parliament. The army whose numbers he determines is under his orders. He appoints to assist him a Supreme Council, which may at first consist one-half, of Englishmen and one-half Indians.

India is divided into as many provinces as may be found convenient. To each of these the Governor-General appoints a Lieutenant-Governor under his orders—each province having its own local council constituted in the same way as the Supreme Council.

The Governor-General will appoint his own staff of Special Assistants—as well as all other civil functionaries—and whenever a vacancy occurs it is to be filled up whenever possible by an Indian, with the twofold purpose of accustoming the Indians to responsibility and of diminishing to the utmost cost of Administration.

I can easily fancy that such a scheme may be pronounced wild and even childish, but for all that, I cannot doubt that under a wise autocratic administration presided over by such a man as we saw here last week—full of kindly feeling for the people he ruled, and with full authority, seconded by a staff of zealous assistants—his own followers and friends—the country being worked solely in its own interests, without any *arrière pensée* whatever, I cannot doubt that within a single generation the whole face of the country might be changed and that the end of the second generation might witness the final retirement of England from an untenable position in India, leaving behind a name for an act of real heroism and wisdom such as yet the world has hardly witnessed. And leaving, too, in the hearts of the people of India honey instead of gall a sense of gratitude which would bind the two peoples together by bonds far stronger than those of the Armstrong gun and bayonet.

That difficulties would arise in such emancipation of India we may admit. They must be faced. But the difficulties of the task should not deter us, and after all, would the difficulties, in the way of

its accomplishment, be so much greater than those which now beset us?

But it is a dream, only a dream—a dream of what might be perhaps—but hardly of what will be. The actual task of separation may involve a more stormy period for our nation to pass through.

I once read a tale whose plot turned upon the theft by an Englishman of a jewel of splendid size and lustre, and of inestimable value, from the forehead of a huge idol in an Indian Temple. The story told how the Brahman priests who were responsible for the safe custody of the stone, learn somehow of its whereabouts and how, in the disguise of itinerant musicians, they followed it to England. The jewel passed through many hands and many strange vicissitudes, but, wherever it was, there somehow or other these three priests kept their eyes upon its possessor, and at last, (I think by some act of violence) succeeded in recovering it. The story ended with the jewel's restoration to its original situation, where it blazed as brilliant as ever in the Idol's forehead.

It was, perhaps, an idle tale, but may we not allegorize it by regarding the stolen stone as emblematic of India's lost independence, destined after many vicissitudes to ultimate restoration as the most inestimable jewel on her brow?

However this may be, we Positivists look forward in the future to the time when the whole surface of the Earth shall be covered by a multitude of small republics, each one working out its own industrial career through the independent efforts of its citizens, in peace and freedom, but all united together in one universal church that shall embrace the inhabitants of the East and West, the white and the yellow and black races by the bonds of the universal faith and the universal worship of Humanity, united in the endeavour by serving her to increase the welfare of her sons and daughters over the whole Planet.

With this noble end before us, the goal of all Human effort, it must be our constant endeavour to see how we can best approximate thereto, taking advantage of every tendency that favours us, and welcoming the support of every man who works towards the same end, let him call himself what he may. For Humanity will know no petty distinctions she will avail herself of every opportunity that opens itself before her in the fulfilment of her destiny to reign over the Earth.

A. CROMPTON.

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RYOTWARI TENURE IN MADRAS.

SEVERAL officials who were deputed by Government, after the introduction of British rule in this Presidency, to enquire into and report upon the land systems in different parts of the country were of opinion that the earlier system generally prevalent was the village system by which the entire village land was held by the village communities on common or joint tenure. All land of the village, arable, waste and forest, was the common property of the villagers. The villagers as a whole paid the tax or assessment fixed according to custom; enjoyed the profits and were jointly and severally liable for the land tax. As the communities grew, the system was perhaps found unworkable and not conducive to the general welfare. In several respects it resembled the joint family system which has been found unsuited to the present age, as stifling all spirit of enterprise and self-reliance and least conducive to the increase of national wealth. It died out, however, a long time ago in very many places and was succeeded by the Ryotwari or system of separate holdings.

The Districts now constituting the Presidency of Madras came under British rule at different times. In 1792 the Districts of Salem, Baramahal, Dindigul and Malabar were ceded by Tippoo Sultan and a few years afterwards Coimbatore and Canara were transferred to the British Government. In 1800 and 1801 the Ceded Districts and the Carnatic passed under British rule. The coast and the remaining central Districts became British possessions at different times.

At the time of the British acquisition of territory, land in several Districts was found to be in an efficient state of cultivation. Mr. Campbell, who submitted his report about the Ceded Districts soon after their acquisition said that in the territories that passed into British possession "all the fields were held by an industrious and numerous

yeomanry or body of small proprietors cultivating either in severalty or joint village communities" paying to the State Treasury, the revenue due according to local usage. It was only in a few Districts, notably in the coast Districts, that the intermediate agency of the Zemindar prevailed.

In the pre-British period the feudal system was mostly prevalent in Malabar. The country was held by a number of petty chiefs who were quite independent of each other though yielding fealty to some paramount power. We have the authority of Sir Alexander Arbuthnot for the fact that they were holding land in absolute proprietary right. Malabar was under Hyder and Tippoo from 1766 to 1792, and during that period they were exacting a portion of the landlord rent from the native chiefs. These were deprived of their rights by the British Government who provided them some allowances, and ryotwari settlement was gradually effected with the individual landholders.

According to Mr. Rickards the existence of private property in the soil quite independent of control on the part of the sovereign was first discovered in Malabar. That the ryots in Malabar and Canara were in a prosperous condition during the reign of the Hindu sovereigns very many authorities agree. As to Canara, Sir Thomas Munro who was sent there soon after its acquisition to enquire into and settle the land tenures with the ryots, said in his Minute of 31st May 1800 that "before they fell under the Mysore Government their land tax was probably as light as that of most countries in Europe." He looked into the ancient registers and traced the tenures and assessments as far back as the middle of the fourteenth century. He found that it was only after the conquest of Hyder that his deputies resorted to "a series of experiments made for the purpose of determining the extent to which assessment could be raised and how much it was possible to extort from the farmer without diminishing cultivation." The assessment was regarded by him "as a fund from which he might

draw without limit for the expenses of his military operations in other quarters."

In 1807 Mr. Thackeray who carefully investigated the existing land tenures reported that "almost the whole land in Malabar cultivated and uncultivated is private property and held by *jennum* right which conveys full absolute property in the soil." He referred to the traditional origin of landed property and found it probable that at a very early period Malabar was conquered by a king from above the ghauts who established the pagodas and the country was governed by theocracy. In any case there was no doubt as regards the antiquity of title to land, and there was "obstinate opinion and general tradition to confirm the validity." "Without going so far back into antiquity" Mr. Thackeray said:—"We find land occupied by a set of men, who have possession from time out of mind; we find that they have enjoyed a landlord's rent; that they have pledged it for large sums which they borrowed on the security of the land; and that it has been taken as good security so that at this day, a very large sum of money is due to the creditors to whom the land is mortgaged." There was a regular system of common law and rules established for transfer, lease and mortgage of landed property from time out of mind. Transfer of interests in property of various degrees of distinction could be traced to a very remote period. He was of opinion that the lands originally belonged to the pagodas and at a very early period were transferred to *Jelmkars* or proprietors who derived title from them. Mr. Thackeray rightly inferred that "had the creditors ever doubted the *jennum* title or imagined that Government would have called it in question it is not probable that they would have risked their money on so precarious a security." He found that the right was admitted by every public and private authority except Tippoo, and that the people of Malabar "were able to defend it with stronger arguments than words" and that the British

Government recognized that 'it would be unjust to call it in question.' He confidently asserted that "it will be admitted that the Malabar *Jelmkars* do possess the full property in the soil."

The land owners of Malabar and Canara were able to present ancient unimpeachable documentary evidence as regards their title to *full proprietorship of the soil*. In many cases there was a chain of documentary evidence by which their title could be traced as far back as the eighth century. In no other Districts now under the direct land revenue administration of the Government of Madras had the peasantry secured and presented such ancient and unmistakable evidence as to their relations with the soil they cultivate. In other places such evidence might have disappeared in the days of confusion and disorder that followed the downfall of the native rule. Malabar and Canara were subjected to the Mahomedan rule for a comparatively short period; and it was only in the latter days of Tippoo's regime that infraction of private rights became the rule of the day.

The proprietors in Malabar maintained that they had allodial right in land, but Government would listen to no such plea. The Board of Revenue had however to acknowledge in their General Report dated 31st January 1803 that in Malabar, barring a few estates forfeited for rebellion there was no Government land and throughout the province individual proprietary rights generally prevailed. The Board observed that the *jennum* or immediate right of property resembled the free hold tenure under feudal systems and *kanom* or usufructuary mortgage right of the mortgagee might be compared to the copyhold.

Canara was under the rule of the Hindu dynasties until 1763 when it was conquered by Hyder and annexed to Mysore. It was subjected to the rule of Hyder and Tippoo until its cession to the British Government. Munro, whose successful administration of the Ceded Districts attracted Government notice, was entrusted with the task

of settling the land tenures of the province. The ryots of Canara were characterized by Munro as "a most unruly and turbulent race." But he was candid enough to admit that they were rendered so because "they twice lost their advantageous tenures once by the conquest of Hyder and now by that of the Company." Four years before the cession of Canara to British Government, Tippoo was not able to recover more than 50 per cent. of his revenue and the ryots succeeded in recovering 20 or 25 per cent. remission. After the advent of the British rule they claimed further concessions, but Sir Thomas Munro was firm and would only consent to bring the revenue to what it was in 1789. All their endeavours to reduce the land tax to what it was during the Hindu rule or during the earlier part of the Mahomedan rule failed. Most of them deserted their holdings and fled to the woods. There was no forest administration then. Yet how long could they continue there? They returned and were obliged to yield to whatever terms Munro as the chosen official of Government, chose to offer. They presented their documents of title to him and asked him to decide and never demurred to his decision. They admired the personality of Munro. He entered into conversations with them and sympathised with their grievances. The Hindus are foremost among hero worshippers, and they officials of prominent good nature who condescend to speak to them, to sit by them and share their feelings. In vain they presented their sanads and title deeds which were of ancient origin. In some cases landed property could be traced as far back as the eighth century. Canara was hardly 30 years under the Mahomedan rule of Mysore. It seems that such evidence was forthcoming in the provinces where the Mahomedan sway made not much impression and where agriculture was far advanced by the sheer industry of the cultivating classes. Owing to the rocky and uneven nature of the soil and dearth of cattle, it was only continuous and

hard manual labour that could make land yield. Little wonder then that the people were tenacious of their rights in landed property and managed to preserve numerous title deeds such as would establish the same. But the restoration of property was not aimed at and the sanads were altogether discarded. In June 1800 he writes to Mr. Cockburn a member of the Board of Revenue.

"Time slips away; busines accumulates, and I am in danger of neglecting the present generation, while I am attempting to ascertain whether their forefathers were permitted to eat a greater proportion of the land than they do. With the view of clearing away difficulties for new men I shall exact the payment of balances more rigorously than I would have done had I wished to take a lease of the country."

Of all the officials deputed to the task of enquiring into and effecting settlements of land revenue with the people of the conquered and Ceded Districts of the Presidency the one that took most pains and was best fitted for the task was Sir Thomas Munro. If from him title deeds of ancient origin and undoubted genuineness which these toilers on land preserved in proof of their contentions received such attention, what hope could there be for the less advanced peasantry of the land in other parts?

No useful purpose would now be served* by tracing people's rights in land before the advent of the British rule in the different parts of the presidency. The House of Commons called for a statement of information from the India Government as to the tenures of land obtaining in the country, and a return was submitted in 1857 "showing under what tenures and subject to what land tax, lands are held under the several Presidencies." In this return it is admitted that "*land throughout India is private property subject to the payment of revenue.*" It is only the mode and system of assessment that differ in various parts.

All occupied land not permanently settled as Zemindary land under regulation XXV of 1802 or altogether exempt from payment of revenue was brought under ryotwari tenure. In his eyes

dence before the Select Committee of the House of Commons on 15th April 1812, Sir Thomas Munro defined "ryot" as the proprietor of the soil. Where the ryotwari system prevails an assessment on the entire arable land is to be fixed by Government. The ryot has the right to hold the land as long as he likes on payment of the assessment fixed on his holding. The assessment is permanent and not variable. The holding is heritable and transferable. As regards permanency there is no difference between the Zemindari and ryotwari tenures. Under the Zemindari system Government is the loser of the benefit that might accrue by the utilization of the waste land within the Zemindari.

As regards land under the ryotwari system, if the ryot cultivates any additional land he has to pay the assessment fixed on that land. The assessment is a moderate unalterable tax so fixed as to enable the ryot to become substantial. The ryotwari settlement has the merit of simplicity. The district will be surveyed and the assessment on the respective holdings fixed. The fixed assessment will be entered in the patta which shows the amount the ryot has to pay. The ryot has the advantage of an abatement in case of poverty or extraordinary losses.

"He has the advantage of knowing, at the beginning of the season, when he ploughs his land, the exact amount of what he is to pay; he knows the fixed assessment of the different fields which he cultivates, and that the demand upon him cannot exceed their total amount; he knows the utmost limit of his rent, not only for the present, but for every succeeding year; for it cannot be raised unless he takes additional land; and that he is thereby the better enabled to provide for the regular discharge of his kists, and against the losses of bad, by the profits of good seasons."

Such is the description given of the incidents of ryotwari tenure by Sir Thomas Munro, and he strongly advocated the introduction of the ryotwari settlement throughout the country, that according to him being the ancient land tenure everywhere including permanently settled

Zemindari land. Of all the systems then in vogue the ryotwari system, as found and expounded by him in his various writings, appealed most strongly to his sense of justice as securing the prosperity of the country and developing its resources to the common advantage of Government and the people. The state will always be sure of its revenue with the prospect of an addition to it by extended cultivation. The ryot will always be sure of what he has to pay and can sink in his land all his available capital and labour without the slightest apprehension of any kind. The ryot always pays the same tax on his holding. No fresh patta need be issued to him unless there be change in the holding. He has only to pay an extra water rate if he makes use of water secured to him at Government expense. Munro often emphasized the fact that ryotwari tenure possesses the special advantage over the permanent settled Zemindari tenure in that the ryot is entitled to remission of assessment on the ground of failure of crop owing to adverse seasons. He is further entitled to increase or diminish his holding at his pleasure.

In the Madras Administration Report of 1855-56 the definition and description of the nature and incidents of the ryotwari tenure as given by Sir Thomas Munro were adopted almost *verbatim* and thereby Governmental sanction of the same was proclaimed. In the return submitted to the House of Commons as aforesaid in 1857 referring to the ryotwari tenure of Madras it is said that "the ryot, under this system is virtually the proprietor, on a simple and perfect title and has all the incidents of a perpetual lease without its responsibilities, inasmuch as he can at any time throw up his lands but cannot be ejected so long as he pays his dues; he receives assistance in difficult seasons and is irresponsible for the payment of his neighbours."

When the Board of Revenue had to report to Government in 1857 on the proposed survey and settlement, they laid special stress on the fact

that "the Madras ryot is able to retain his land in perpetuity without any increase of assessment as long as he continues to fulfil his engagements."

Thus we have it on the authority of the Board of Revenue, the Government of Madras and the India Government that under the ryotwari system the holder of land is its absolute proprietor subject only to payment of assessment fixed thereon, and that the said assessment when once fixed is unalterable and not liable to enhancement.

Although ancient and unimpeachable documentary evidence was forthcoming so as to establish a higher title to land in some provinces, notably in Malabar and Canara, Sir Thomas Munro would countenance and recommend no such title for recognition, for he considered that it was only under the ryotwari system that the interests alike of the State and the subjects could best be served and industry, and enterprise would increase so as to ensure general prosperity. As to the fixing of the assessment there was utter confusion from the commencement of the British rule. Notwithstanding that Government officials clearly found that during the previous rule, especially during the reign of Tippee, the permanently fixed ancient kist was discarded, and land assessment was raised so high as to leave little or nothing to the ryots, no attempt was made by Government to restore it to the original or normal condition.

Sir Thomas Munro administered the Ceded Districts from 1800 to 1807. The revenue rose from 12½ to 18 lakhs of star pagodas when he left them in 1807. In 1807 Sir Thomas Munro reported that the assessment levied from the people was so high in the Ceded Districts and throughout the Deccan, that the ryots ceased to assert proprietary or possessory right in the holdings and were ready to relinquish one and take up another which they considered was lighter assessed. The belief gained ground in many places notably in Cudappah that after the end of the year land was at the disposal of Government, and "land accordingly is sometimes taken from one ryot and given

to another who is willing to pay a higher assessment." "If this power is exercised with caution" says Sir Thomas Munro "it is not from the fear of violating any possessory right but of losing revenue, for the assessment is generally so high, that if the ryot is dispossessed the same rent can seldom be got from a new one." The ryot was obliged to unite in himself the characters of labourer, farmer and landlord. But he was hardly able to sub-let his holding because the rent would not suffice for his subsistence.

Sir Thomas Munro observed the injurious effects of an uncertain and variable system, and in 1807 submitted to Government, after his survey of the Ceded Districts, a complete plan for rendering the field assessments "not the permanent maximum merely, but the permanent absolute demand upon the cultivator. The Government of the day admitted the evils of the uncertainty of demand but declined to adopt the proposal on the ground of financial exigencies. In 1817 the Court of Directors issued strict orders that they must have a surplus revenue of one million sterling from India and threatened that they would take the revision of the establishments into their own hands. The ryotwari system was well-nigh abandoned in favour of village system with a view to easily secure the largest possible amount of revenue. Even the small doles of remissions in bad seasons were disallowed. Villages were rented out and village renters were encouraged to compete for the highest sums and rack-renting went on to such an extent, that the country was entirely ruined. Peasant-proprietors sank to the condition of serfs.

Notwithstanding the express pledge given by Government that under no circumstances would they tolerate the infraction of private rights, in the insatiable desire for increase of revenue many private rights were extinguished. Porambores were not liable to tax and the villagers were entitled to the produce of the quarries and mines. Waste lands were the property of the villagers on which they grazed their cattle freely. They cut

down the forests for fuel or implements of husbandry. These were among the privileges they enjoyed without payment of tax, but they were gradually deprived of them.

In his evidence before the Select Committee of the House of Commons Mr. Hodgson, member of the Board of Revenue, said that "great advantages should result from placing Collectors and their native officers under certain control in their assessments and giving the people invitation and opportunity to apply to a third party to settle disputes between them." He said that under this impression, the Board of Revenue prepared in 1818 a regulation, for ryotwari assessment and collection in every province containing rules intended to be enacted in the manner prescribed by an Act of Parliament. The Regulation or the Collection of rules was sent to Collectors for their instruction and guidance, but it is not known what became of it. Mr. Hodgson gave expression to his strong opinion that a great part of the evil of ryotwari settlement was due "to the anxious desire of the Revenue Officials to keep up the revenue at the beginning which necessarily led to heavy assessment in the end." If as to over-assessment what Mr. Hodgson said in 1830 be true even now there are many who cannot help thinking that the revenue conscience has not undergone any much appreciable change in this direction. In the return to the House of Commons above referred to, it was admitted "that unfortunately the share of Government was generally fixed too high." The evidence before the Famine Commission of 1880 and 1900 shewed that the leaning always went strongly in favour of over-assessment.

In order to determine the assessment payable on the holding, the net produce was arrived at after making certain deductions from the gross produce on account of cultivation expenses. Government share was converted into money and levied as the assessment due. The ground on which the assessment was constantly varied and

enhanced was that the extent of Government share was nowhere defined and limited. That it must have been a tax moderate and limited by custom during the rule of the Hindu dynasties is apparent, for all the reports of the officers who investigated the land tenures on the introduction of British rule agree that the peasantry were then prosperous and the tax was easily realized. Sir Thomas Munro could only mention a single instance of the enhancement of tax by the Bednore Rajahs after their conquest of the provinces beyond the Western Ghats, and even then it hardly amounted to $\frac{1}{4}$ of the gross produce. But it is to be remembered that it included the assessment and all the existing imposts of rates and cesses as well as the value of all forest produce freely utilized by the ryots. It was only during the interregnum of the Mahomedan rule that, the assessment was constantly varied and enhanced. Sir Thomas Munro rightly observed that, had such assessments been levied during the pre-Mahomedan period, the provinces of Malabar and Canara would have been a desert by that time. He deplored, as Messrs. Naorojee and Dutt are now deploring, that the land assessment was looked upon by Tippoo as a fund from which he could draw whatever money he wanted for his wars in other places.

The question of reduction of assessment depended upon what was necessary for the ryots, (that is, the proprietors reduced to the position of labourers,) to be allowed so that the rest might be got for the State revenue. "I have made no other reduction" said Munro "in the assessment of Tippoo Sultan, than such as was absolutely necessary in order to ensure the collection of the rest." He looked upon himself as a mere Collector of Revenue and only recommended in the case of Canara a reduction of $\frac{2}{3}$ per cent. of the amount of assessment raised during the latter days of the Mysore rule. "My chief reason" said he in his Minute of 19th November, 1800 "for remitting $\frac{2}{3}$ per cent. was to convince the landlords that demand is limited, and thereby to encourage them to exert

their whole means in improving their estates *without any fear of a new assessment.*" (The italics are mine). Was this pledge acted upon? "Then they make no difficulties in paying both the old rent and the additions before the end of June, not because they are more able to pay than formerly, but because they believe that their readiness in discharging their rents will not under the Company's Government be regarded as a proof of wealth or as an argument for laying new impositions upon them." How true is this even to this day! How often do the supporters of the present system advance as an argument in favour of ryots' prosperity their ready payment of assessment without employment of coercion? The Hindu ryot sets apart the state due before he consumes any portion of the yield even for his food.

For over half a century after the introduction of the British rule uncertainty and confusion went on, and the moderation of revenue officials is the only limit to State-demand. The more conscientious and moderate among them raised their voice now and then, but the paramount necessity of extracting as large a revenue as possible to be sent home could not but stifle the still small voice in not a few of them. Be it said to the credit of the Madras Government that they often fought for the good cause. So long back as 1814 the Madras Government addressed the Court of Directors as follows:—

"The grand difference between the view at present taken in England regarding Indian revenue and that taken here seems to be, that in England the fear is that "the public demands upon the resources of India may not keep pace with its prosperity; while here (Madras) the universal sentiment, we believe without any exception whatever, is, that the prosperity of the country is so much depressed by the public demands, that without the most liberal and judicious management there is more danger of its resources declining than room to hope for their speedy increase. This is a sentiment which we cannot too strongly convey to

your Honourable Court. It is addressed to your wisdom, to your sense of justice, to your humanity, it concerns the successful administration of your Government, no less than the welfare and happiness of a numerous population, and the prosperity of an extensive country, favoured by nature, protected from internal commotion and foreign assault, and requiring only moderation in the demands of Government "upon its resources to render it rich and flourishing." Noble sentiments these, but never acted upon!

Although for about half a century the permanency and fixity of the State-demand were recognized as a principle of the ryotwari tenure, the Board of Revenue, instead of fully giving effect to them, chose to make an important modification when the survey and settlement were introduced, in 1855 viz., that the assessments would be liable to periodical revisions,—without, as was said, altering the leading characteristics of the ryotwari tenure as regards the permanency of the assessment. The Court of Directors was of opinion that the assessments should be revised once in every thirty years and the Board of Revenue agreed in that opinion. The Government of Madras expressed in its Resolution of 15th February 1858 that the assessments when once made should be unalterable for a period of 50 years and communicated the same to the Secretary of State for India. Lord Stanley, the then Secretary of State, in his despatch dated 15th December, 1858 said that he was of opinion "that frequent changes in the commutation price and consequently in the money rate of assessment should be avoided and when the demand was fixed on a basis sufficiently moderate to allow for ordinary fluctuations in price the term of settlement should be as in Bombay thirty years." This important modification, abolishing the fixity of assessment deprives the cultivators of Madras of that certainty which is the *conditio sine qua non* for agricultural improvement, and has kept the population in a state of helpless poverty,

For half a century Government drew from the ryots by every possible means as much revenue as they could. They condemned the excessive nature of the assessments imposed by the previous Governments, but in practice they imposed and levied higher assessments in almost all the ryotwari Districts, as appears from the writings of Col. Read and Sir Thomas Munro; the peasantry was impoverished and the country was brought to ruin. When after a century's experience, land was surveyed and settled, the Government withdrew from the cultivators that permanency of assessment which had so long been theoretically recognized. The cultivators of Madras, still recognized as "proprietors of the land, are thus subjected to periodical enhancements of the State-demand; and even Lord Ripon's recommendation that these enhancements should be claimed only on certain "definite conditions" has been rejected. British administration has secured peace in the country, but keeps the agricultural population in a condition of perpetual poverty.

K. PERRAJU.

AN OPEN LETTER TO MR. DUTT.

DEAR MR. DUTT,

I don't know your address in India, so write a line in "*The Indian Review*" to thank you for the collection of papers on the Land Revenue System of British India.

As you may have seen, I have already said what I had to say on the Government Resolution in the *Asiatic Quarterly Review*. On the whole I think we may congratulate ourselves on having stirred up the various Governments to some purpose, and I only want now to make a few remarks on your letters in reply.

I agree with you that the Government of India had no business to drag in the Permanent Settlement as they chose to do so. You had a perfect right to re-assert your views, but you must excuse

me for saying that your arguments are far from convincing to me. I don't know what exactly caused the famine in Bengal of 1770, as I have no hooks of reference here, though I fancy it was a good deal owing to war, unsettled Government, and over-assessment; but surely it is going too far to say that there has been no famine in Bengal because of the Permanent Settlement; and not true that there has been famine wherever there has been no Permanent Settlement. There has certainly been no famine in Tanjore, Godavery, and Kistna since the work of Sir Arthur Cotton; yet there has been no Permanent Settlement. Nor is there any trace of famine in the Tambraparni valley since the great irrigation works were carried out there some centuries ago, or in Malabar and on the West Coast generally, where the climate is perhaps even more favourable than in Bengal.

You yourself have said that famine is due primarily to failure of rain, or of irrigation.

Bengal is exceptionally well watered, and, like all irrigated districts, is practically safe against famine, provided it has a reasonable and settled government and is not over-assessed. I cannot understand your saying "that the Permanent Settlement has saved Bengal from the worst results of famines is proved by history as completely and unanswerably as any economic fact can be proved." There seems to be no such proof at all; and I have no doubt that with a settled government and a moderate assessment there would have been no famine in Bengal even if the Settlement had been ryotwari, any more than in those parts of Madras I have mentioned, where pepper precautions have been taken. I don't know at all but I should be surprised if any purely rice land in Bengal yields more or is more valuable than the ryotwari land in the Tambraparni valley.

Then I do not think you can fairly claim Sir Thomas Munro as a supporter of permanent Ryotwari Settlement in the sense in which the Bengal Settlement was made permanent; because

(as I shewed in *The Asiatic Quarterly Review* for October 1900, pp. 406-7,) he always contemplated the possibility of raising the assessment in case of need. I do not know whether you have ever thought it worth while to reply to my criticism of your original book, (the only one I have read;) but, if not, I must adhere to the opinions there expressed; and, as a convinced "Land Nationalizer," I lose no opportunity of denouncing Landlordism, even when concealed under the seductive guise of a Permanent Settlement in which the rights of the tenants have at last been secured.

With reference to your note on pp. 502 and 503 of the "*Indian Review*" for October last it seems to me that you have been misled by the book of Standing Information (I suppose that compiled by Maclean?) It was in no sense a Volume of Standing Orders and had no authority whatever. At the same time I am inclined to think "that half the net was generally considered to be equivalent to one-third of the gross." Still the assessment was always intended to be half the "nett," no matter what the "gross might be."

With the rest of your criticisms of the Government of India's Resolution I am generally in agreement. Trusting we may meet again in due course and that you may be successful in your attack on over-assessment,

Yours sincerely,
J. B. PENNINGTON.

LAND PROBLEMS IN INDIA.

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ALSO

The Resolution of the Government of India and the Summaries of the views of the various Local Governments and other important official papers.

PRICE ONE RUPEE.

APPLY TO—G. A. NATESAN & CO., ESPLANADE, MADRAS.

PHILOSOPHY AND LIFE.*

PROFESSOR Muirhead of Birmingham has done well in bringing together in a book form the series of able, lucid and, we would add, practical papers, on a number of important subjects, that he has, from time to time, contributed to the columns of the *Fortnightly Review*, *Mind*, and other journals. These papers, altogether thirty-six in number, are brought under two heads—Ethical and Logical; but though the logical subjects are more or less technical in character, and could only be appreciated by a student of philosophy, the other nine papers are on subjects of universal interest, and deal with such burning topics as Education, Imperialism, Poor Law Relief, Temperance Reform &c. There is a unity of purpose running through all these articles which is well expressed in the title of the book "*Philosophy and Life*;" for these essays are a vindication of the practical value of the study of Philosophy in that it helps us to have a clearer idea and truer conception of the problems of every day life. In fact the very first essay is an able vindication of the study of Philosophy in its bearing upon life, and the essays that follow are concrete illustrations of the application of philosophical principles to some of the actual problems of life.

Philosophy is generally looked upon as a study of "soulless abstractions." There can be no greater mistake than this, for there is no study which is so intimately connected with the practical interests of life, and more especially with the supreme interest of religion, as the study of Philosophy. In the second essay, which is a graceful tribute to the memory of the late Professor William Wallace of Oxford, one of the greatest of present-day English philosophers, our author points out how, though Wallace's eyes were turned away from temporary

* "*Philosophy and Life and other Essays*" By J. H. Muirhead, M. A., Professor of Mental and Moral Philosophy in the University of Birmingham. Swan Sonnenschein and Co., Ltd. London.

changes to the eternities of thought and being, he was still no idle dreamer. The reality on which his gaze was anxiously bent was the reality that is in life and things. The fact is, philosophy is not so much a special kind of occupation different from those of ordinary life, but just those ordinary occupations thoroughly understood. Take for instance the light that philosophy throws on religion. We are familiar with the usual agnostic position that so long as our knowledge is confined to ideas which we receive through sense-experience, and so long as we have no experience of an Absolute and Infinite, a belief in such an Absolute and Infinite is unrealisable. In opposition to this view what does modern philosophy—chiefly idealistic—teach us? It is merely this, that the essence of religion is the assurance that there is a unity or whole in things in their relations to which if one could but penetrate to them we should find their purpose, meaning or significance. The general value of religion, therefore, is thus defined by Wallace:—

“Religion is a faith and a theory which gives unity to the facts of life, and gives it, not because the unity is in detail proved or detected, but because life and experience in their deepest reality inevitably demand and evince such a unity to the heart. The religion of a time is not its normal creed, but its dominant conviction of the meaning of reality, the principle which animates all its being and all its strivings, the faith it has in the laws of nature and the purpose of life. Dimly or clearly felt and perceived—religion has for its principle, (one cannot well say its object) not the unknowable but the inner unity of life and knowledge, of act and consciousness, a unity which is certified in its very knowledge, but is never fully demonstrable by the summation of all its ascertained items.”

Leaving the general subject of “Philosophy and Life,” and passing on to the special subjects illustrative of the general theme, we would single for mention just three articles. The article on “Stephenson’s Philosophy of Life” is one of special interest to Indian readers; for the works of this writer are not studied to such an extent as they should be by Indian students of English literature. Stephenson was not merely a great writer, but he was a thinker who had a consistent, workable philosophy of life. There is a vein of optimism running throughout

his writings which is the outcome of a carefully reasoned out theory of life. Like Carlyle, Stephenson is of the opinion that “there is in man a higher than love of happiness, he can do without happiness and instead thereof find *blessedness*.” If not happiness, what then, is it that inspires men in living? What is it that represents the highest capability in humanity and meets its indefinite aspirations? Stephenson answers that “it is a vision of something men hardly acknowledge to themselves—an ideal of life behind and beyond their conscious impulses—so nothing now hidden by insistent passions, now flashing out clear and strong like a revolving light at sea—in one marvellous and far reaching, in another struggling through a sorely blemished or distorted medium.” In one word, Stephenson believed in “the ultimate decency of things,” as he put it in a letter to Sidney Colvin—or to use another famous expression, which we owe to Matthew Arnold in “a stream of tendency that makes for righteousness.” From this cardinal teaching, this central principle, follow as a corollary all his other teachings. Here are some:

“What is good in life, and what each in heart of hearts desires is not any wages of life but courageous utterance of himself in the way appointed him.”

“The demand of the soul is that we shall not pursue broken ends, but great and comprehensive purposes in which soul and body may unite like notes in a harmonious chord. The soul demands unity of purpose, not the dismemberment of man, it seeks to roll up all his strength and sweetness, all his passion and wisdom, and makes him a perfect man excelling in perfection.”

“What is most wanted in these days—the one thing needful for every day—is that we bring the same energy and intelligence that we apply to our business and professions, to that most difficult of all business—the business of living, and take some individual responsibility to have it managed on the best known plan.”

No modern secular writer has done so much to rouse in us a sense of the significance of conduct as Louis Stephenson, and this was because he brought the right kind of philosophy to bear upon the problems of life.

In his essay on “Imperialism” Professor Muirhead combats the idea that the idea of Imperialism is a creation of the nineteenth century. It was neither the work of Disraeli nor that of the

Primrose League but of Goethe and Carlyle. Our author is not particularly enamoured of Imperialism, and hence dwells more on the responsibilities of an Imperial Empire than on its glories. "We can never often remind ourselves," says he, "that there is nothing inherently permanent about an empire such as ours. Its very growth brings its own lesson with it, teaching us that the Empire which we have gained, Portugal, Holland, Spain, France have lost, none of them if we are to believe the historians, from any inherent lack of the spirit of enterprise, but the first two because their empires were founded on too narrow a basis—the last two (to quote Sir John Seeley) for no other reason than that they had too many irons in the fire." If the English Empire is to be permanent, the rulers must try to readily understand their dependent peoples and adopt a policy of conciliation toward them. In one word the good of the subject must be the first object of Government.

We pass over the essays on Poor-Law Relief and Modern Temperance Reform, as they are not of practical interest to Indian readers, and refer briefly to the thoughtful and able essay on Liberal Education which is of special interest at the present moment in connection with the report of the Universities' Commission now under discussion. Liberal education Professor Muirhead defines as "the education which by developing our powers gives us access into a larger and truer world." In the first place, it enables us to understand nature and its laws and for this Scientific knowledge is necessary. Secondly, it gives us the key to the world of art and literature which man has created out of his deeper experience of the meaning of nature; and for this literary studies are necessary. These two correspond to the world of knowledge and the world of feeling. But there is a third requisite of a liberal education, corresponding to the world of deed, of actions, and this is supplied by Philosophy. Conduct is not merely three-fourths of life as Matthew Arnold would have it, but it is the whole of life; and the

study of those ideals which are the basis of conduct should have a place in any scheme of liberal education. Our author condemns strongly the sharp line of distinction drawn in the London and other Universities between the scientific and literary sides of education, and he looks upon this as absurd as the old division of mind into separate faculties. As we have modified the psychological view on which the old "faculty" hypothesis was built, and we now recognise that the mind is an indivisible whole, and, though distinguishable into parts, each with a special function of its own, yet each part reflects the complex structure of the whole and never acts independently of the others, so "we ought also to recognise that each department of knowledge, though it appeals to a special side of the mind, and thus performs a special function in education, yet just because it is a part of the organic whole we call the World cannot fail to touch the mind on every side as well."

In thus touching briefly upon the salient points of some of the most important essays in this volume, we feel we have not done full justice to it; but we hope that we have given at least some idea of the main purpose running throughout this volume of essays, so as to arouse interest in it. The book is full of ideas which compel the reader to think for himself, and we would strongly recommend a perusal of it, not only to the student of philosophy, who will find a mine of useful information in the essays dealing with technical points of philosophical controversy, but also to the general reader who will rise from a perusal of it with the necessity of living one's own particular life in the light of the whole, of trying to see it from the point of view of its significance—its significance for life in general—which is after all *philosophy*.

S. SATHIANADHAN.

Hebrew Origin of the Brahmins


By MR. M. VENKATARATNAM, B. A.

Price per copy four as. Postage extra.

G. A. Natesan & Co., Publishers, Esplanade, Madras.

ELECTRIC DISCHARGE THROUGH GASES.

KATHODE RAYS AND RONTGEN RAYS.

HEN the poles of an induction coil at work are drawn apart from each other, powerful sparks fly between them through the air space. In small induction coils and in air of ordinary density these sparks are caused only by the opening currents, that is, the currents induced in the secondary spiral every time the main current is cut off in the primary coil. The closing current has not sufficient tension to overcome the resistance of the air. When the poles are sufficiently apart, the sparks look like lines of light and resemble in all respects the sparks of an electrostatic machine. But when the pointed ends of the discharge are not far from each other, we observe a slightly luminous mantle of orange red colour surrounding the spark proper. This mantle is called the aureole.

As the density of the air is diminished the spark strikes through a longer distance, and when the density has become very small, as in the vacuum over the mercury in Torricelli's tube, the spark with its crackling noise disappears, and we have the aureole alone in the form of a stream of rose red light, which behaves in all ways like a current flowing through a conductor. Thus this stream of light rotates round a powerful magnet, just as a copper wire conveying a current does.

The phenomena of electric discharges through rarefied gases were first studied by Plucker in vacuum tubes made by the mechanic Geissler of Bonn. For this reason, these tubes are generally known as Geissler's tubes. They have a variety of forms, but all of them contain some residual gas at one-hundredth or one-thousandth of its density under ordinary circumstances, and have two small platinum wires fused into the glass wall. These two platinum wires form the *electrodes* and serve to convey the discharge to and away from the tube. As the opening current of the induction

coil alone has the necessary tension to pass through the tube, the discharge passes through the tube always in the same direction. Hence we call the electrode by which the discharge enters the tube the positive electrode or *anode* and the one by which it leaves the tube the negative electrode or *kathode*.

When the discharge passes through a Geissler's tube we notice several peculiarities. First of all the residual gas in the tube glows brilliantly, the colour of the glow varying with the nature of the gas; for example, it is rose red in the case of air. If this light is examined with a prism (a spectroscope), a spectrum of bright lines or bands characteristic of the gas is observed. Geissler's tubes intended for spectral work are generally called Plucker's tubes and contain capillary tubes in their middle.

The light of the glowing gas in a Geissler's tube possesses in a large measure the property of producing *fluorescence*. By fluorescence we understand the giving off of light by bodies without any sensible alteration in temperature when light rays or rays of some other kind fall on them. For example, when we look straight through the surface of kerosene oil, it appears almost colourless, but when we look at its surface in a slanting direction we observe a blue shimmer. Uranium glass, of which sometimes paper weights are made, has a yellow colour, but when ordinary light falls on it, it emits a green fluorescent light. In some Geissler's tubes one or more of the parts are made of uranium glass, which fluoresce green during the discharge.

If we carefully examine the two electrodes during the discharge, we notice certain differences. From the anode light proceeds in the form of a stream filling almost the whole section of the tube. This light is *striated*, that is to say, it consists of luminous discs separated from one another by an intervening dark space. The anode light never reaches the *kathode*, but stops at a short distance from it, the interspace between remaining dark. The

greater the rarefaction in the tube the longer is this interspace. The kathode itself is surrounded by the so-called negative glow, in which two different layers are noticeable, one close to the surface of the kathode and the other separated from the former by a dark zone running parallel to the whole surface of the kathode. The positive light seems to be conveyed by the current and passes through all the bends in the tube, whereas the kathode glow appears to be of the nature of a radiation. The latter is obstructed by bodies placed in its front and does not follow the bends in the tube.

When the density of the gas in a vacuum tube is diminished to one hundred thousandth of its value under ordinary circumstances, the phenomena accompanying the discharge completely alter their character. As these phenomena were investigated in detail by Crookes, the vacuum tubes that exhibit them are named after him. In these tubes the anode light has almost disappeared, but from the kathode proceed rays perpendicular to its surface. These rays, called the kathode rays, produce intense yellowish green fluorescence whenever they strike the glass. Thin plates of metal and discs of mica placed in the way of the kathode rays intercept them and cast shadows. They also exert mechanical pressure. A small wheel provided with mica vanes at its rim and set so as to rotate freely about its axle revolves rapidly when the kathode rays fall on the vanes. Powerful thermal effects are also produced by the kathode rays. A kathode of aluminium shaped like a concave spherical reflector brings the kathode rays to a focus at its centre, and a piece of platinum placed there grows red hot. Another noteworthy property of these kathode rays is their deflection by a magnet. A magnet moved in the neighbourhood of a Crookes' tube showing a shadow produces also a motion in the shadow.

Closely connected with the kathode rays are the new rays discovered by Rontgen and named after him. These rays proceed from the brilliantly fluorescing parts of tubes with high vacua and also

from other bodies, on which kathode rays fall. The bright surface of platinum has the remarkable property of developing very powerful Rontgen rays when kathode rays strike it. Rontgen rays produce fluorescence as well as photographic effects. They are capable of penetrating through solid bodies. On the differences in the penetrability of different substances for Rontgen rays rests the possibility of producing shadows of parts of the human body on a fluorescent screen (of potassium or barium platinocyanide) or on a photographic plate. The softer parts of the body cast only faint shadows, while the bones cast darker shadows. The shadows of metals are deeper than those of wood, leather, &c.; and among metals the greater the density is, the deeper is the shadow. Aluminium whose density is very small is almost transparent to Rontgen rays, while the highly dense platinum is very opaque to them. Unlike the kathode rays Rontgen rays are not deflected by a magnet, a difference which makes us suppose that they are essentially different in character. The kathode rays seem to be due to the projection of extremely small material particles, called electrons while Rontgen rays do not differ in kind from light rays.

P. LAKSHMI NARAYAN.

We have received from Mr. T. Fisher Unwin, Publisher, London, a copy of the memoirs of Paul Kruger. This is a stout volume containing over 540 pages of matter.

Mr. Kruger dictated these memoirs to Mr. H. C. Bredell, his private Secretary and to Mr. Piet Grobler, the former Under Secretary of State of the South African Republic. These gentlemen handed their notes to an editor, the Rev. Dr. A. Schowalter, who spent several weeks at Utrecht in constant colloquy with Mr. Kruger elucidating various points with the aid of the President's replies to a list of some hundred and fifty to two hundred questions which Dr. Schowalter had drawn up.

In the Appendix at the end of the second volume have been collected several documents in the shape of speeches, proclamations and circular dispatches, including the famous three hours' speech delivered by Mr. Kruger, after his inauguration as President for the fourth time, on the 12th of May 1898.

The memoirs afford very interesting reading and throw considerable light on what may be styled the Boer side of the story of the recent South African War. We propose to give a lengthy notice of this work in an early issue.

The World of Books.

"SCHOOLS AT HOME AND ABROAD," by
R. E. Hughes Swan Sonnenschein & Co., Limited.

There have been critics and critics in the educational field of England. Judging by absolute principles, they have generally pronounced indiscriminate censure upon the educational system of England. Such sweeping denunciations have only defeated their purpose by cooling down the ardour of educational enthusiasts, of what few there may be in England, instead of exhorting them to work up to the ideal. This book is a calm and dispassionate attempt at a true estimate of the system of education in England by the comparative method: and it shows that there is no need to despair and that England is not as yet the land of a lost cause.

Taking Germany, England and America for comparison, England must in many points own to a position of inferiority. Public interest in Primary Education is far keener in America and Germany than in England. The German teacher commands far greater respect than his despised English brother. But it must be admitted that the English teacher has a nobler sense of his vocation than the American teacher who takes to teaching only as a stop-gap in life. In regard to elementary education, however, England must be given credit for a better system than either America or even Germany. There is conspicuous absence of any organised system of Infant Schools in Germany and where they exist at random, the Kindergarten system on Froebel's lines is seldom observed—a signal instance of the saying that a prophet is not honoured in his country. The special features of the English school are its artistic decorations and its playground. In reference to the latter it is said, "German children rarely play, and American children seem to be losing the power of play—a sad state of things indeed." In the matter of Primary Education, again, England may well stand comparison with other states. There are indeed many defects, and most of these are due to local disadvantages, but there are on the other hand, counterbalancing merits. Schools are after all political institutions and they partake largely of the character of the national government. "The differences are those of a bureaucratic and democratic states and England is the half-way house." Comparing the teachers of the three countries, the author roughly lays down, "The German teacher is pedagogically the finest trained teacher in

the world. For practical skill and in the handling of large classes the English teacher is unequalled. For spontaneity, vivacity and enthusiasm it would be difficult to find a peer of the American teacher." Education in England suffers largely for want of public spirit. Says the author, "Until our people have been trained to see the criminality of robbing the child of his moral right to a good education, by keeping him from school or sending him to the factory too early or working him out of school hours, we shall suffer." The importance of Primary education cannot be too strongly emphasised. "It is in the Primary Schools—the people's schools that nations are made and unmade, and it is in the elementary schools, if anywhere, that imperial England will learn her trust and burden." Primary education must be complete in itself and should not be deemed merely a step to higher grade schools. It is proposed therefore, to introduce more of nature study and to organise more of school excursions, even though it be at the slight expense of the thoroughness of the 3 R's.

England's great need at present is a system of Secondary Schools. Says the author, "Personally, I believe, that if England loses her commercial supremacy, it will be because of her inefficient and inadequate system of Secondary Schools." The tyranny of the classical languages must primarily be overthrown, and the modern languages be established. Natural sciences must more largely enter into the curriculum of the school. The aim of the Secondary School should be the development of character and sound culture suited to modern needs and requirements. Again the practically-minded Englishman hardly recognises the value of a sound liberal culture in commercial education. It is easily confounded with technical training. Book-keeping, shorthand and a dash of linguistics can hardly be dignified with the name of commercial education. It is not the tricks of a trade that should be taught in a commercial school, but broad, general and scientific principles on which a particular art is based. It is clear therefore, that the curriculum of the Secondary School should undergo a revolution. The natural and physical sciences must be made the basis of the curriculum, not mere additions. This alone will bring about fully cultured citizens.

There is an instructive chapter on 'The kindergarten at home and abroad' and another on 'The characteristics of childhood.' The book is written throughout in clear and attractive style. It deserves to be read especially by teachers and students in Training Colleges.

"From England to the Antipodes and India—1846 to 1902 with startling revelations" or "56 years of my life in the Indian Mutiny, Police and Jails." By J. Tyrrell, Pallavaram.

The reminiscences of a man who has served the Government for nearly 59 years, who, having enlisted in the ranks worked up his way to the post of Sergeant, who served through the whole of the Mutiny and afterwards as Inspector of Police, who subsequently entered the Gaol Department and rose from the rank of gaoler to be the "pukka" superintendent of a first class central gaol cannot fail to be interesting, especially when he is endued with the gift of a facile pen and plain speaking. We are not prepared to say that there are any revelations of a startling nature in this book. There is a great deal of criticism of the various officials with whom Mr. Tyrrell was thrown into contact, and, although this criticism may possibly be distasteful to some of the officials still living, we are not prepared to say that it is undeserved.

One thing strikes the reader, and that is that throughout his career Mr. Tyrrell has profited by the discipline he learnt in the army, that he was absolutely honest and devoted to the interests of the Government and the Department which he served. Although he occasionally falls foul of officials less scrupulous than himself he appears to have invariably enjoyed the most complete confidence of the superior authorities.

The Gaol Department is one about which the ordinary man in the street knows very little and therefore the details which Mr. Tyrrell gives cannot fail to be highly interesting.

Whereas on the one side a paternal Government deems it incumbent to pay a very strict regard to the health and well-being of the convicts, when Mr. Tyrrell first entered the Department nearly 30 years ago, he found a complete system of corruption amongst the subordinate officials.

With this system Mr. Tyrrell was in constant conflict, with the result that wherever he went he was able to introduce administrative and financial reform by which the convicts and the Government benefited.

Of course a man of this kind could not fail to make enemies amongst those whose objects were diametrically opposed to his own, but throughout his unique experiences Mr. Tyrrell seems to have invariably triumphed in the end. Certainly the most interesting part of the book is that which applies to the Gaol Department. Employed for ten years at the

Penitentiary in Madras he was brought into contact with all kinds of gaol birds and his reminiscences of the various convicts he came across, some of them concerned in the different *causes celebres* which have occurred during the last thirty years are interesting in the highest degree. From Madras he went to Palghat, from thence, after a short break spent in Madras, he went as Superintendent of the Palamcottah Gaol, then to Cannanore and lastly to Rajahmundry.

He devotes several chapters to each of these gaols and everywhere that he goes his experience is highly varied.

There is no monotony about the book, and we can recommend it to our readers as a very interesting contribution to a little known subject. The tricks of the prisoners, their systematic attempts to break the gaol rules, the manner in which they are able to carry on correspondence with their friends outside and to get hold of forbidden articles of luxury is most graphically told. The chapters on gaol diet, the health of prisoners and gaol discipline are not only interesting to the general reader but are also calculated to be of the utmost value to any one connected with the Gaol Department. Apart from his official duties Mr. Tyrrell appears to have been a jealous amateur in private theatricals and he tells many excellent stories of the different persons with whom he was brought into contact. In this connection Major Hughes Hallett, Captain Yeldhem and Colonel Kenny Herbert are classical names connected with the Madras Presidency, and one could almost wish that Mr. Tyrrell had given us a few more details on this interesting subject. During the whole of the fifty nine years which Mr. Tyrrell served the Government in various posts he never took furlough to England or even went to a hill station. Although 79 years of age he appears to have enjoyed vigorous health during the whole of his service and we trust that he will continue for many years more in receipt of his well-earned pension. We can confidently recommend this book to the perusal of our readers.

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"LOYAL RAJPUTANA" by Munshi Yavala Sahai. *The Indian Press, Allahabad.*

We looked forward to a perusal of this book with a considerable amount of interest. There is no part of India about which the halo of romance and mediæval chivalry exists as about the Native States of Rajputana, with their feudal traditions and strange admixture of virtue and vice, "linked with one virtue and a thousand crimes." The book consists of 346 pages of which nearly one half are occupied by the reasons which produced the Mutiny of 1857. These reasons possess no originality in themselves and are clearly copied from other standard writers. Throughout the book there is a very marked difference in the style of composition.

When the Munshi Sahib has a good author to copy from, his language is excellent, but when he indulges in original writing of his own there is a considerable amount of slipshod, not to say, "baboo" English. The second part of the book is confined to the share which each of the Rajput States took in the Mutiny. As a rule they were generally loyal though in some instances troops got out of hand, set aside their native rulers, massacred the European officers and then joined the mutineers. The story is by no means well told and before we reach the end there is a good deal of wearisomeness and repetition. That the Rajput States should have been loyal during the crisis of 1857 is no cause for wonder.

The recollection was still fresh with them of the terrible oppression which they suffered in the early years of the last century at the hands of Scindhia, Holkar and that Prince of freebooters Amir Khan. They were in danger of total extinction, and it was only by the intervention of the Marquis of Hastings that a stop was put to the ravages of the Mahrattas and Pindharies by the formation of subordinate alliances with the different states under which the Rajput Kings enjoyed the protection of the British arms.

This policy of subordinate alliance had been initiated by the great Marquis of Wellesly and it was only due to the half-heartedness, not to say pusillanimity of the Board of Directors that the policy was relinquished and gave way to the selfish "ringfence" policy of Lord Cornwallis and Sir George Barlow. At that time we had not sufficiently realised the responsibilities and duties of Empire. We selfishly drew a ringfence round the possessions we had acquired and left the rest of India, as it were, to stew in its own juice. The result was that for twelve years Rajputana and Central India were left to the ravages of the Mahrattas and the Pindharies.

If the Mutineers of 1857 had succeeded in throwing off the British yoke there would have been a repetition of these scenes of chaos and desolation, and it is therefore no wonder that the Rajput Princes should have remained loyal to the paramount power. That a new history of Rajputana is required there can be no doubt.

All that we now have is Tod's "Annals of Rajasthan," a most valuable and scholarly book but a perfect jungle of information through which the reader has great difficulty in finding his way. Even this book does not carry us further than 1825 and there is ample room for a new concise history brought up to date. We are not of opinion that the Munshi Sahib's book will supply this want.

It may be of use to the schoolboy as a cheap book of reference but it is not calculated to satisfy the requirements of a scholarly student of history.

THE HIGHWAY OF FATE.—By Rosa Nonchette Carey. London Macmillan & Co., Ltd. In Macmillan's Colonial Library.

No one who purchases the Highway of Fate can complain of not getting enough for their money as it runs to 506 pages, in fact it suggests inevitably the long lane of the proverb. We believe Rosa Nonchette Carey has a considerable vogue among those who like their fiction mild. For such this story will be a continual feast, for it deals with the doings of a set of morally perfect men and women who display the domestic affections in ideal strength and purity, take tea with one another with commendable regularity and do nothing more adventurous than take country walks and learn the bicycle. There is however a terrible villain in the tale who has in early life been guilty of the horrible atrocity of an imprudent marriage. He redeems it however by a convenient and heroic death in a New York hotel fire. The authoress is by no means without skill in the discrimination of character, and her blameless book will be read with pleasure by people who use fiction as an anodyne rather than a stimulant.

FOR A YOUNG QUEEN'S BRIGHT EYES,
by Col. Richard Henry Savage. George Bell and
Sons, London and Bombay. In Bell's Indian
and Colonial Library.

This novel presents a striking contrast to "The Highway of Fate." In it virtue is exceptional, the men being for the most part world-worn cynics immersed in intrigue and the women no better than they should be. The action is as vigorous and varied as might be expected from such dramatis personæ. These are also by the bye historical—the period being that of the struggle for Italian unity. The following—from the last page—will give some idea of the style and contents of the book.

The star of love was lighting the blue waters of the Gulf of Gaeta as the *Marmion* glided along under the tranquil evening skies.

The Earl of Morningham could see the lights gleaming far away in the great Villa Sokolski at Capna, where the steadfast woman kept her unwearied vigil by the ashes of the passionate man who had died in her arms.

In all the clouded past, as he was borne away to the clear glow of the morning skies, he could only see the graceful figure of that loving woman, self devoted and walking with her dead lover there in the rose alleys of Capna.

"Truly!" sighed Morningham. "Love alone is immortal."

And as he went below, the screaming of a bird wailed over the waters where Hannibal's galleys were once whelmed!

What furtive peeper at the end of the story could resist the allurements of such a conclusion?

PLAYERS OF THE DAY.—Messrs. George
Newnes Ltd.

Under this title this well-known firm of English publishers are issuing in twelve fortnightly parts a new and superb serial of great interest to all lovers of art and drama. We have received the first four parts of this series. Each part contains five pictures of four leading actors or actresses of the day and short readable accounts of the careers of the personages represented. We have no hesitation in saying that anyone who buys these charming pictures will be satisfied that the publishers by no means use exaggerated language when they say that the striking beauty and originality of the pictures, combined with the excellence of the printing, make each of these portraits a real work of art which no person of refined taste need be ashamed to frame and hang upon his wall.

The pictures are tastefully mounted, 15 inches by 11 inches.

DISTANT LAMPS. By Jessie Reuss. Jarrold's
Colonial Library. Cloth 3s. 6d.

This is a novel of power and considerable artistic insight; but it would be unfair to take it as the best the writer can produce. The novel suffers from a not entirely eradicated immaturity; but it also plainly indicates that we may expect better work in the future.

The story is rather an ordinary one, and centres round two persons—a man and a woman—whose capacity for selfish indulgence—even when such indulgence runs counter to moral laws—is abnormally developed. Both follow their sweet wills and both suffer, but in different ways. The woman dies, but only after recognising that in her lustful search after pleasure, she has lost her capacity for pure and true love—woman's precious heritage and gift. The man lives on after her death, remembering only the past, but careless of the future, as to him it is empty without her.

The interest of the novel lies chiefly in the manner of its weaving. There is no attempt to keep up a long drawn out agony of interest; but rather there is a successful attempt to meet attention by a subtle arrangement of incident and by dramatic effect.

The novel is a cross between Miss Corelli's—or shall we say Mrs. Humphrey Ward's—books and those of Miss Ellen Thronycroft Fowler. We have the predominating purpose, and the sharp rattle of society talk. But like all hybrids the effect is composite rather than introductive of a new type. The conversational sparkle is not as brilliant as in *A double Thread*. There are however, some very good examples:—"The whole scarecrow of religion goes at times like a paper garment of convival." "When one learns that genius prefers dingy finger-nails and is fond of sausage eaten with a knife, the poetry of his production is gone." "One does not discuss one's early prox with a late acquaintance." "Fiction is a dream of puppets, her society life but an education in new shams."

There is not much of character-development, but what there is, is delicately done.

Distant Lamps has made us hopeful that we shall have further and certainly better novels from Miss Reuss.

We have received from Mr. Edward Arnold, London, through their representatives Messrs. Longmans in Bombay, two volumes of a history of the House of Selucus by Mr. Edwyn Robert Bevan, M.A. The price of the 2 vols. is 30/- net. We propose to review this work at length in a future number.

Topics from Periodicals.

THE STABILITY OF THE BRITISH INDIAN EMPIRE.

There is a remarkable article under the heading of 'Empire Building in India' in the January *East and West* by Mr. Protap Chunder Mozoomdar. Throughout the whole paper there is an eloquent plea for a better understanding between the rulers and the ruled and a better sympathy towards the Hindus on the part of Englishmen, official and non-official. The reason of the failure of the Dutch, Portuguese and French who had important possessions in India at one time or other, to establish a firm foundation is due to the fact that "they lacked the sanity and the power of assimilation which could influence the people into their own likeness, or influence themselves to accept the genius of the people." These qualities, Englishmen have in an eminent degree, and by their sagacity and firmness in laying down principles which best can guide them in ruling three hundred millions of human beings of various castes, creeds and character, they have contrived to build the Empire of India as it is to-day.

Mr. Mozoomdar assigns as the chief cause of this decided improvement, the education policy of Lord Macaulay, Sir Charles Wood, and the Education Commission of 1882. No body, whether he be a pariah or an outcast, has been refused admission into the new aristocracy of intellect thus created, and into all the offices and emoluments which it brings. This liberal education has produced quite a large number of men who have to convert their brains into money. All are not successful—the majority of them at least are not—in this art and hence discontent and a harder struggle for life ensue. Where can we find the remedy for this serious state of things which must and does cause considerable anxiety to the Indian Government and Indian politicians in general?

Does the remedy lie in smothering the monster before he has done all the mischief he is capable of, or in converting him into a minister of grace? In a country where, in all previous ages, the highest knowledge was always a free gift, it would be a fatal mistake to make its costs prohibitive. But times have changed. When men make it the business of their life to trade in education, and strive to surpass each other as to who could make it cheaper and more worthless, a line must be drawn somewhere, some sort of control becomes imperative. What that control should be, is a very difficult question. But so much is certain, that in talking of "private enterprise" in education, the authorities of former days never anticipated that the "private enterprise" should degenerate into private interest and

mercenary emulation. Over-cheapening produces about the same evil as over-heightening the prices of knowledge. It makes education almost nominal, either by levelling the best intelligence into dull common-places or excluding it by reason of the costliness.

But Mr. Mozoomdar is not at all for restricting or in any way limiting the spread of education.

Improve the methods by all means, but the principles of sound education are universal principles, no scepticism is permissible in that. Unfavourable results under unfamiliar circumstances do not justify even the slightest withdrawal of educational advantages from any class. On the other hand, extension of the same is the wisest course. But men, even empire-building men, are apt to become incredulous of their own principles under the surprise of unexpected disappointments. Faith in knowledge, truth, and human nature in every case is next to faith in the power of Providence. And such faith is an essential factor in empire-building.

Vague promises unfulfilled and vague privileges ungranted had better not be made, says Mr. Mozoomdar.

Whether the privileges are obtained by agitation, or through the free self-adjustment of the Government to the spirit of the times, they should not be given half-heartedly, given by one Viceroy, practically withdrawn, or essentially modified, by another. Vague promises, made in impulses of generosity on grand occasions, had better not be made at all, than minimised in performance seeing what eager expectations they create in sanguine, sensitive minds, and what deep and bitter disappointments they leave behind in every case of non-fulfilment or inadequate fulfilment. The sincerity, good-will, and good faith of the imperial authorities must in all cases be beyond suspicion. It is worth quite as much as an army, though less expensive.

The question of national or European prejudice defeating justice where an European stands charged by an Indian, has a word of remonstrance from our distinguished Bengali.

This is not the first time, nor the tenth, it is said and asserted that the same broad uncompromising justice need not be expected when it charges, especially a criminal charge, is preferred by an Indian against a European. Thousands of cases have proved what sort of verdicts the juries are practically agreed to bring in and what sort of sentences the courts are practically agreed to pronounce. This is a distressing and vexatious subject, but again and again one realises that momentous issues hang upon it. The power which the strong wield over the weak is not unoften a righteous power, but the test of strength lies in the power the strong wield over the strong, and it is here that an apparent element of weakness characterises the administration of affairs. The new departure which the present Viceroy has boldly made in this subject is beyond all praise. It may affect his popularity, but it will reinforce the Empire. When about thirty years ago the present Emperor, then Prince of Wales, came out here on his memorable visit, there was, at a certain concourse, a case of cruel assault by a European subordinate upon a coolie of some kind, a most commonplace, unnoticeable thing. But His Majesty noticed it at once, and had it peremptorily stopped. Now if this keen sense of personal justice were acted

upon by all authorities, military, civil, judicial, executive, strictly and courageously in similar or graver circumstances of European violence, a new era of, inter-racial relations would dawn upon the country. In educating us the rulers of the empire have made us somewhat like themselves, and if the influence continues the likeness must grow more and more. What the British claim from each other, instructed Indians have begun to claim from them. In doing justice to these claims the Government will do justice to themselves, to their professions, to their well-known ideas.

Mr. Mozoomdar dwells a little on the want of private sympathy which the English official evinces towards his Aryan brother and the consequent and inevitable gulf which separates the two, which however must be bridged if India and England are to become one.

The British Government so far has failed to take an adequate lesson from this tendency to fusion. Their benevolence is at least as sincere as Akbar's, but their officials, who at one time perhaps were more accessible, now spend no more time in the country than they inevitably must, and then go back whence they came, in many cases washing their hands altogether of all Indian affairs. These men are by no means always unsympathetic, but the sympathy is official, rarely personal, and it often fails to go home to the hearts of the people. A virile nature like that of the Anglo-Saxon does not easily bend to impulsive and overflowing sympathy. It runs more readily into the sterner moulds of reserved dutifulness and practical usefulness.

And here comes the closing paragraph of Mr. Protap Chunder Mozoomdar's noteworthy article in which he conjures up to the imagination the magnificence of the royal city of Delhi and of the Delhi Durbar.

The motley millions from every corner of the land, headed by their own chiefs, are silently gathering. The great army in its many branches is marching into position. The tide of expectation rises high in every breast. The historical scenes of far-away events, semi-mythical or fully authentic, Hindu, Buddhist, Mohammedan, rise into remembrance. Was it not here that the ancient Hindu potentates performed their sacrificial ceremonies for the people's good? Was it not here that the wonderful edicts of Asoka were proclaimed? Was it not here that Akbar dreamed his dreams of a universal faith? And who can foretell what charter of privileges and progress the present Emperor of India is going to proclaim, what great principles and departures are to be announced? With the profoundest loyalty to our beloved Sovereign, with heartfelt confidence in the motives and acts of the imperial authorities, with the utmost faith in the inspiring and directing Providence of God, we stand at the threshold of this new era for the development of the Empire and the elevation of our people.

This was written before the Durbar. Poor Mozoomdar, his disappointment must be great!

SOME SOUTH AFRICAN PREJUDICES.

From an exceedingly well-written article on the above subject in *Chambers's Journal* which we wish could be quoted entire, we take one extract, which illustrates what a great change some years' stay among an inferior race produces in Europeans as regards their ideas of human brotherhood and tenderness to life in general.

There is, however, one subject on which the new-comer should be wisely circumspect, and that is the native and his relation to the white. Nowhere, not even in the most anti-negrophilist states of America, is the 'colour line' drawn more carefully than in Natal, and only a degree less strictly in the other colonies. The new-comer must never manifest any interest in the natives, except to abuse them; and he will not need a second warning against bringing up the subject of missionaries. Should he do it at a reputable town-house, he will find his remarks received in chilling silence, and the host adroitly changing the conversation. At a farm he would most likely be treated to a wearisome discourse on native missions that will surprise him. Let the new-comer keep his eyes open and his tongue silent on native matters until he has been in South Africa a year or so, and he will be thankful for the advice here tendered.

Another matter that often irritates the new-comer and prompts him to hasty generalisation is the indifference to the sufferings of animals that is unfortunately too pronounced a trait of South Africans. It can hardly be called cruelty, for it is rather that evil which is wrought through want of thought much more than want of heart. It is not unusual in new countries whose inhabitants have had to undergo hardships, and who consequently look upon a certain amount of pain and suffering as the due of man and beast alike. Still, the average Briton often finds his temper and patience sorely taxed by exhibitions of cruelty to horses, oxen, and dogs that in England would excite the indignant protest and interference of the spectators.

THE INVENTION

Is one of those very few weeklies to which we have always turned with the certainty of knowing the latest advances in industrial and scientific progress. It will, we understand, be hereafter issued monthly, the present size being enlarged while at the same time other improvements are promised.

THE PLACE OF INDIA IN THE EMPIRE

It is impossible to interest the British tax-payers and their representatives in the House of Commons in Indian affairs unless and until at least a shilling out of the charges on account of India is met from the British Exchequer. This aspect of the Indian question is brought out very clearly in a small contribution to *East and West* of January by Sir Charles W. Dilke.

Parliamentary members who take much interest in Indian questions like the writer find themselves unable to get one extra day for the discussion of Indian affairs. It is to gain this and to interest the British tax-payers and Parliamentary representatives in Indian affairs that some members of Parliament including the writer moved, on behalf of the Indian Committee, a resolution for an annual vote of Parliament for the salary of the Secretary of State. Though this is the view, the demand was not without justification. Sir Charles Dilke says:

Our main contention was that the exceptional treatment of the India Office in this respect as compared with every other department of the state, and of the Secretary of State for India as compared with every other Minister, seemed to indicate a lesser responsibility to the Imperial Parliament in the very case in which the need for such responsibility was the strongest.

The point of the question was either ignored or not understood, but so far as it referred to the absence of Parliamentary control and responsibility over the Secretary of State's actions, Lord George Hamilton thought that the question contained a reflection on the unlimited powers that he possessed and promptly replied that he was not an autocrat and was surrounded by a council. And Mr. Caine's remark that he selected his own council was protested against with the remark that the councillors were absolutely independent. Sir Charles Dilke put another aspect of the question before the Indian Minister *vis.*, the omission of India in connection with a proposal by Government for the representation of colonies in an Imperial Council for discussing the larger affairs of the Empire and pointed out the injustice of the course when India contributed £414,000 annually for the Naval expenditure of the British Empire while the British Empire boasted of a colonial contribution of £328,000 as the result of the Colonial Conference. Referring to this and more especially to the fact that in spite of the Viceroy's protest, the increase of the pay of the British soldier at the cost of India was resolved upon and put forth before the House of Commons as a settled affair, Sir Charles Dilke observed:

It is certain that if the salary of the Secretary of State had been borne on estimates the papers would have been

seen and the House of Commons would have been enabled to discuss upon the Appropriation Bill in August the bearing on the terms of service in the British army of opinion constantly and consistently expressed by the Indian Government.

The division on our resolution was most favourable. In the 119 of the Government Majority there were no Liberals. Only two Liberals walked out; and the 45, or with Tellers 47, of the Minority were in fact the entire Liberal party present in the House. The Irish members, according to their custom of this session, took no part in the division, with the exception of two who are at odds with their own party; and had the Irish members voted, the Government Majority would have been very small indeed.

India is nowhere in the British Empire although Lord Onslow referred to it as an "Empire within the Empire."

COSMOPOLITAN ART.

"There is no more fundamental fallacy than to suppose that art should be something cosmopolitan, knowing neither age nor country," says Mr. Selwyn Image in friendly dispute with Mr. Lewis Friday in the *Art Journal* for December.

"Art is a language of wider than national comprehension, and seems, therefore, just the one form of expression which can and should be cosmopolitan," replies Mr. Day. "I don't contend that art should know neither age nor country, or that what is native to one country is equally proper to another. The point on which we differ is whether there be not much that is foreign which we may assimilate, and still be Britons. May one not claim to be a citizen of the world and yet be most at home by one's own fireside? A Londoner may very likely be more at home at Peckham than at Pekin, but that does not imply that his range of vision should end with the postal radius. Your argument seems to me not to allow the poor citizen of the world at home."

"I am sure," explains Mr. Image, "when he is full-fledged, a man may assimilate much that is foreign and still be a Briton. But seeing that every nation's art is based on, and differentiated by, certain national characteristics, I would have students wholly taught and thoroughly grounded in these first. I mean Englishmen in English traditions, Frenchmen in French traditions, and so on. Foreigners may give us certain finishing touches, they cannot lay for us a sound basis. I am thinking particularly at the moment of students. As soon as these are masters of their craft I am most ready to allow they would do well to study foreign products, *e.g.*, even so alien a product as Japanese art. But let a man know his own country before he is off galavanting abroad."

INDIAN POVERTY.

Sir William Wedderburn, the well-known friend of India, pleads in the columns of the *Speaker*, a liberal weekly, for a scientific diagnosis of Indian poverty according to the methods adopted by Mr. Charles Booth, the well-known salvationist and Mr. Rowntree who recently published an important book on the condition of the people of York.

In the House of Commons debate last February on the Poverty of India, Lord George Hamilton put forward a comparison which suggests important consequences. He compared the condition of India, as regards extremes of wealth and poverty, to that of London; referring as follows to Mr. Charles Booth as his authority regarding London:—

The result of his (Mr. Booth's) investigations, minute and elaborate, was that he estimated not less than 30 per cent. of the population of this great city were in a condition equivalent to pauperism. So it is that . . . you have a community in the aggregate wealthy and increasing in prosperity and all the outward attributes of material wealth, and yet at the same time inside that community there may be a dense mass of poverty. And such, I believe, to be the condition of India, I believe we have, on the whole, improved substantially the condition; but there is still a dense mass of poverty, which let us do all we can to mitigate and relieve.

The comparison, says Sir William, is a highly suggestive one, and I ask Lord George Hamilton to carry his argument to its legitimate conclusions. His point is that in sounding the depths of poverty, aggregate figures and general averages are of little value. Thus London has a high average of wealth, but this does not prevent 30 per cent. of the population being in a condition equivalent to pauperism. And the same reasoning holds good for India. Lord George claims that the general condition of India has improved. That may—or it may not—be true. But supposing it to be true, the fact is of little value as a measure of the co-existing poverty. The highest average income claimed for the Indian population is about two pence a day. Below this line there admittedly exists "a dense mass of poverty," which represents millions on the verge of starvation; but the true extent and depth of this dense mass of poverty will not be known until we have detailed local investigation like that conducted by Mr. Booth.

Sir William Wedderburn very pertinently asks: Lord George Hamilton recognises the merits of Mr. Booth's scientific methods. Why will he not permit their application to India? He has refused to do so, not once, but many times. What are his reasons? He admits that social reformers were "startled" by the revelations contained in Mr. Booth's book on London. Much more would they be startled by the facts brought to light if he would permit

similar economic enquiries to be made in India. Such enquiries were found necessary in London, though their people rarely die of hunger in the streets. Much more necessary must we hold them to be in India where during the last famine (of 1900) 1,250,000 persons died from starvation; especially when we realise the astounding fact that these unhappy people died within sight of abundant food in the bazaars, at moderate prices which they were too poor to purchase; "Omnia procumuntur contra spoliatores"; or, as the text books put it: "In all cases in which a party, having the reduction of the best evidence in his power refuses to produce it, a presumption arises that if produced it would be unfavourable to him." If, therefore, the Indian authorities refuse to produce the best evidence obtainable by scientific methods, regarding the condition of the Indian workers, it must be inferred that this evidence would be unfavourable—if not fatal—to their claim, so untiringly put forward to exclusive knowledge and supreme administrative success.

The demand on behalf of the public for this evidence has been persistent, and the challenge to produce it has been formal and authoritative; but Lord George Hamilton has remained obdurate. Year after year, in the House of Commons, a motion asking for a detailed economic enquiry in a few typical Indian villages has been brought forward by members interested in the ryot's fate; but on each occasion he has called up his big-party battalions and compelled the House of Commons to declare that more light shall not be thrown on this dark subject, and that the British public, though in the position of trustees must remain ignorant regarding the true condition of the Indian cultivator and the causes of his ruin.

But the British public have been deeply stirred by the horrors of recurring Indian famines; and are not prepared to acquiesce in such a flagrant neglect of duty. Accordingly the Indian Famine Union has been formed on an economic and philanthropic basis, having for its special object to investigate the causes of Indian famine mortality and to promote possible means of prevention. The first step was to seek trustworthy information regarding the elementary facts of the case, and with that object in view the following resolution was passed:—

That looking to the wide divergence of opinion regarding the economic condition of the Indian cultivator and the causes of his difficulties a memorial be prepared asking the Secretary of State for India to cause a detailed enquiry to be carried out in selected typical villages in each of the Provinces affected by the famine, with a view to ascertain the actual condition of the cultivator and to suggest means by which he may be enabled better to withstand the attacks of famine.

In accordance with this resolution a memorial was framed, setting forth briefly the grounds for which the enquiry was desired; and this memorial was signed by a large number of the most influential persons in the United Kingdom, including the highest dignitaries of the Church, headed by the Archbishop of Canterbury and the Cardinal Archbishop of Westminster. Members of both Houses of Parliament of all shades of opinion, retired Indian officials, civil and

who had held the highest offices under the Crown, heads of colleges, literary men and women of distinction, mayors and provosts of towns, chairmen of county councils, and presidents of chambers of commerce. There could hardly be a more representative body of memorialists. And what they asked for was something easy and simple. They only prayed the Government of India, with its vast and costly official machinery, to do for a few small Indian villages, what Messrs. Booth and Rowntree have accomplished single-handed for London and York, at their own expense.

It seems almost incredible that such a request, so made, should be refused. But so it is. And the refusal is the more remarkable on account of the surprising circumstances by which it was attended; for the Indian Famine Union proposed to present their memorial by means of a deputation, to be introduced by an ex-Viceroy of India, and Lord George Hamilton agreed to receive this deputation; but at the last moment he withdrew his consent, so that the Union had no opportunity of personally supporting their memorial, and answering any objections that might be raised to the proposed enquiry. Why does the Secretary of State shrink from this enquiry? So alarmed does he appear to be at the idea of scientific investigation that he shuts his ears, and will not even listen to the arguments in support of it. He admits the "dense mass of poverty," he admits the one and a quarter million deaths from famine: he admits the analogy of the London poor, and the efficacy of Mr. Booth's methods. Why then will he not allow the same tests to be applied in India?

When Lord George Hamilton refused to receive the deputation, the memorial was forwarded to the India Office by hand; and shortly afterwards an important public Conference was held at the Memorial Hall, Farringdon Street, under the auspices of the Indian Famine Union, Mr. Leonard Courtney being in the chair. On that occasion the following resolution was moved by the Marquis of Ripon, seconded by Lord Hobhouse, and adopted unanimously:—

This Conference deplores the continued prevalence of famine throughout vast regions in India, the permanent poverty of great masses of the people, the widespread indebtedness of the agricultural population, and the lack of precise official information regarding the foundation causes of agricultural distress, and is of opinion that it is urgently necessary that detailed local enquiry should be made into the economic conditions of typical villages in the Famine areas, with a view to ascertaining the fact upon which preventive as well as remedial measures suited to the various provinces may be safely based.

This resolution, together with others on irrigation, agricultural banks, technical education, etc.,

was sent to the Secretary of State, who forwarded it for report to the Viceroy in Council; and we now have the reply of the Government of India. The despatch is a remarkable one. The Government of India seem to have been greatly agitated by the request for definite information, and the objections they raise are somewhat self-contradictory. They consider that the proposed village inquiry is "earnestly to be deprecated"; that the results "would be misleading and even harmful"; that to carry out such an investigation would be "well nigh impossible"; that it would be intensely resented by the people; that it would create hopes impossible to realise; that typical villages cannot be selected; and that the enquiry would be too great a burden for over-worked officials. Moreover they think that such a village enquiry is "superfluous," because they possess an extensive machinery for the collection of general statistics, and they consider the enquiries so made "over large areas simultaneously furnish a far juster and more adequate representation of the condition of the people, as a whole than could result from any detailed inquiry into the circumstances of a few individual households or villages." From this it appears that the Government of India hold by what is known as the "extensive," as opposed to the "intensive" method of enquiry; and that they have not taken to heart Lord George Hamilton's teaching as to the futility of general averages as a measure of pauperism. They altogether misapprehend the object we have in view. We are not at present asking for general statistics, however valuable regarding "the condition of the people as a whole." We want to know the concrete facts regarding the debt-crushed famine-stricken ryot, and the causes of his ruin. We have a very sick man to deal with, and we ask for a scientific diagnosis of his particular case—not for a general report on the health of the province.

What was the method followed by Messrs. Booth and Rowntree? This is how Mr. Rowntree describes it in his book "Poverty":—

At the outset I had to decide whether to collect information on the "extensive" method or on the "intensive." In other words, the choice lay between gathering together and analysing such statistics regarding towns in the United Kingdom as were to be found in Government returns, reports by medical officers of health, the records of the various branches of the Charity Organisation, etc., or studying in detail the conditions of a single typical town. A very little enquiry sufficed to show that any picture of the condition of the working classes of provincial England based on the former method would be very incomplete and of doubtful service.

Accordingly he decided to follow in the steps of Mr. Booth, and selecting York as a typical provincial town, he undertook a house-to-house

inquisition extending to the whole working class population. He thus obtained the facts regarding the housing, occupation, earnings, and expenditure of every wage-earning family in York; these particulars, obtained during the autumn of 1899, extending to 11,560 families living in 388 streets, and comprising a population of 46,754. He went into the question of diet, obtaining exact information regarding the quantity, character, and cost of the food consumed, and determining the minimum sum necessary to maintain families of various sizes in a state of physical efficiency. He further analysed the causes to which their poverty was due. From the facts thus collected, he was able to establish a true measure of existing poverty, and to estimate how much of it was due to insufficiency of income, and how much to improvidence; also, how many families were sunk in a poverty so deep that their members suffered from a chronic insufficiency of food and clothing, and how far this led to physical deterioration and a high death-rate.

This is the sort of enquiry needed in the famine-haunted villages of India. The Government of India say that to carry out such an enquiry would be "well-nigh impossible; and that they cannot select typical villages. If so, how is it that, under their orders, Mr. Thorburn, late Financial Commissioner, recently carried out such an enquiry, holding by holding, in typical groups of villages in the Western Punjab? They say that the results of such an enquiry would be "misleading." If so, why did they accept Mr. Thorburn's conclusions as the basis of the Punjab Alienation of Land Act of 1900? Again, they plead inability on the ground of overwork. But they seem to have forgotten that Mr. Thorburn's enquiry, which (like Mr. Booth's), was minute and elaborate, was completed within six months, and involved an extra expense of only £300, although his operations extended to no fewer than 742 villages. Finally, the Government of India can hardly be serious in alleging that the Indian cultivator will resent an enquiry which will create hope in his despairing heart. Sir Antony Mac-Donnell, in his Famine report, tells us that "there is no greater evil than the depression of the people," and in the fore-front of his recommendation he places the maxim, "Put heart into the people." The Indian ryot expects but little; his hopes are not high; but there is no reason why those hopes should be disappointed if the Government of India will only put away their baseless fears, abandon the plea of impotency, and welcome those methods by means of which a scientific diagnosis may be secured, and suitable remedies applied.

ECONOMIC LESSONS OF INDIAN MONSOONS.

Among the articles of interest to India in the January number of the *Asiatic Quarterly* is one on "The Monsoon of 1902: Its economic lessons," from an Indian correspondent. After referring to the fickleness of monsoons in the past, the writer predicts that since nothing in nature can stand still, a new stage has arrived in the evolution of the Indian monsoon, and that during the next hundred years or so the rainfall may gradually become more and more scanty, and finally become a negligible quantity and cease altogether. The writer remarks:

Whatever may be the fate of India in the near or distant future, it may, perhaps, be not altogether fruitless at this stage to study the statistics of rainfall for as many years past as it may be possible to obtain them, and to see whether the average rainfall of the country is increasing or diminishing every year, or is stationary. Unfortunately, the figures for such a study have not been published, so far as I know. My suggestion is that the statistics of rainfall of some important rain stations in India, like Bombay, Poona, Ahmedabad, Jubbulpore, Allahabad, Calcutta, Lahore, Madras, Colombo, Rangoon, and some others, may be collected for the last hundred years, if possible, and the average of decades taken for the purpose of comparison. No harm can be done by their publication, while—if the statistics be such that some general deductions may be drawn from them—some good might result.

The element of uncertainty in an Indian monsoon, as well as in the winter rains of India, is, if anything, increasing every year; and the student of Indian economics will, I think, agree with me in saying that, where Nature is so capricious in her distribution of rainfall, the task of the Government of India to bring happiness and prosperity to the masses of this country, who are poor agriculturists and labourers on the field, is likewise becoming increasingly difficult every year.

The one lesson, then, we have to learn from our recent experience of Indian monsoons is that anything like confidence in our estimate of rainfall in future years should be avoided. Some people talk complacently of cycles of fat and lean years, but our recent experience does not lend much support to this view of mathematical precision, and he must indeed be a bold man who can say with confidence what the next year would be like, not to take a longer view. If these premises be correct, it would seem to be the obvious duty of the Government and the public of this country to husband their resources, and to be prepared for future contingencies, and a few remarks upon the present

economic situation, its faults (if any), and their remedies, would, perhaps, not be out of place.

Extensive Irrigation is advocated as the first remedy. And, first, since India is essentially an agricultural country, where nearly four-fifths of the total population have to depend solely upon agriculture for bare existence, it will be obvious that the encouragement and improvement of agriculture should be the first duty of the Government. It is needless to point out that, in a country where the periodical monsoon and the winter rains cannot be depended upon, irrigation must be the chief item in the programme of public works. Now, in India there are many valuable irrigation works. In fact, India has something to be proud of in this respect, for her irrigation officers have not only served India, but have also served other countries, and notably Egypt, where the name of that distinguished engineer, Mr. Willcocks, will doubtless long be remembered. But it cannot be denied that much yet remains to be done. The extent of land for which irrigation is available at present is calculated to be approximately 20,000,000 acres, while the total acreage of land in India which could be cultivated is believed to be somewhere near 1,000,000,000 acres. Roughly speaking, the proportion is as 1 to 50. It would seem, therefore, that irrigated land is as yet a mere fraction of the land which for agricultural purposes would have to depend totally upon the rain. Lord Curzon, with his usual administrative foresight, has ordered a Commission to report upon the whole question of irrigation, and there is very little doubt the Commission will recommend a more extended use of irrigation, involving some large works and a great outlay of money, when the real difficulty will be the usual one of finding money. It may be noted, however, that, taking large and small irrigation works in India, the net profit on the outlay is well over 6 per cent. per annum according to the latest official reports,—an achievement of which the Government may well be proud, considering the general poverty of the country. If, therefore, there be no surplus available out of the annual Indian revenues to meet a capital outlay, let us hope the Government will see their way to borrowing the money in the open market at the cheapest rate, and start new works at an early date, which may prove not only protective and productive, but also be the means of employment of thousands of people who may be out of work owing to the present depressed state of agriculture. If we are going to have a succession of bad years in future—and there is no saying what is in store for us—irrigation seems to hold out the best prospect of averting a serious econo-

mic crisis in the future history of the country. We have the history of Egypt to encourage us in the belief that with extended irrigation will come increased prosperity to the country. It has been argued in certain quarters that because there are no perennial streams or rivers in certain parts of India, or because the lands are high and the sources of water at a considerably lower level, therefore those parts cannot be irrigated. These matters for irrigation experts to decide, and the Commission appointed by Lord Curzon will doubtless take them into consideration. It may be permissible, however, for a non-expert to refer in this place to the "Kazusa" system of boring for deep wells in Japan, as described by Mr. Norman in a recent publication, and to the experiments of Mr. Chatterton, of the Madras School of Arts, to utilize, by a pump worked by a small oil-engine, the almost unlimited supplies of sub-soil water by enlarging and deepening existing wells in the country. I may also refer here to the ingenious idea, which is of American birth, I believe, of utilizing the heat of the sun for motive power to work the irrigation machinery—a solar motor, in fact, by which the rays of the sun are reflected from a series of powerful mirrors upon a metal cylinder filled with water, and the steam thus generated in the cylinder is utilized for working the irrigation machinery. According to a recent account, a solar motor has been actually set up and experimented upon in California but with what practical results I do not know. If the idea be of any practical value, India is just the place where the solar motor should be tried, the heat of the sun here being very great, and often phenomenal, while it will cost nothing.

Next to irrigation, as being the means of improving and encouraging agriculture, comes the question of railway construction in India. That railways have a most important share in the economic development of any country can scarcely be disputed, and it would be churlish to deny that India has benefited by her railways. I have very little doubt that the 25,000 miles of railway which exist in India to-day, and which promise to be about 30,000 miles in the course of a decade, have been the means of developing the many resources of the country, of fostering its trade and agriculture, of increasing its military strength, of mitigating the worst terrors of famine by the timely distribution of food in famine areas, and last, but not least, of a general education for the people, apart from the mere facilities of travelling which railways must give to any country. But unfortunately, these Indian railways, with a very few exceptions, have not so

far proved to be successful commercial undertakings, but, on the contrary, have been worked at a great loss, and in that limited sense may be considered to be a burden to the general tax-payer. It is an index, I think, of the general poverty of the country that railways do not pay in India. From statistics published by the Government, it seems that the total capital outlay on the Indian railways from the date of their first construction in 1848 up to the year 1900 was over £133,000,000, while the total loss in working them exceeded £26,000,000 within the same period, taking the rupee at its present value of Rs. 15 to the sovereign. These figures cannot be considered satisfactory, and suggest haste and a want of grasp in manipulating finance, though it is fair to state that the Government of Lord Curzon cannot be held responsible for any mistakes made by previous Governments. The railway earnings of the current year (1902) for the first six months are half a crore of rupees behind those of the corresponding period of the previous year, while the current annual loss in working the lines is estimated in round numbers at a crore a year for years past, and it is difficult to say when this annual deficit will stop. If, therefore, the railways have proved to be an economic gain in various ways, as previously described, they have also proved to be an economic loss in hard money, and the question immediately before us is whether the construction of railways should be carried on with the same feverish haste in the future as in the past, regardless of what they cost or what they earn. A great many of these railways, especially in Upper India facing Afghanistan, are strategic railways built primarily for the defence of the Indian Empire, and as long as military considerations prevailed their construction was justifiable, for the first duty of a community evidently must be self-preservation. But it would seem that the limit is reached, or very nearly reached, of strategic railways, and the Government would do well to pay particular attention to the purely commercial aspect of these undertakings, and to desist from building any lines not likely to pay in the commercial sense. In the future economic development of India, irrigation must take precedence of railways, for, while the former means an increased production of food, the latter would probably mean a financial burden on the country, and would retard progress instead of accelerating it. To give railways to India in her present state of health is like giving a sick man rich food which he cannot digest. For if the people die from want of food, as they have lately, and if agriculture should suffer from want of water, as it doubtless has lately, the railways, it would seem, will have

little to carry as passengers or stores, and must suffer in their turn from want of traffic. At the same time, it seems very desirable that the Government should offer every facility and inducement to capitalists to build new lines at liberal terms short of any guaranteed interest on the outlay. What the Government cannot do themselves let the public do, and let a dog-in-the-manger policy be avoided. The question of small gauge feeder railways to bring traffic to the main trunks is one of some importance to the country in its present condition, and the general opinion seems to be that such railways will pay commercially if judiciously selected; but for such consummation it is necessary that the Government should avoid all reticence or mystery, and should publish the results of surveys, the probable cost, the probable earnings, the terms, and other matters of interest, to the would-be investor, or it is certain he will not come forward with his purse.

THE INDIAN FAMINE UNION.

"The Indian Famine Union" forms the subject of an Editorial note in the *Imperial Argus* and the following comments speak for themselves:

What is wanted is an accurate knowledge of special facts and special conditions such as can only be obtained by some such definite and localised inquiry. It would seem to be a simple matter for the India Office to institute such an inquiry, without which it will be impossible to arrive at the truth or otherwise of the Union's persistent contention that poverty is the chief cause of Indian famine, and that the native cultivators have been sinking deeper of late years into a condition of poverty that is fast becoming chronic and hopeless. Why is it that this demand for an inquiry is, with equal persistence, set aside by the India Office? Is it because it fears the facts?

The Editor then goes on to observe:—

Whatever answer time and proper investigation may give to the problem raised by the Indian Famine Union, there can be no doubt that, in the meantime, the whole question of Indian expenditure should be thoroughly reviewed in the light of what we know of present conditions in India. We know quite enough as it is, without special inquiry, to realise the iniquity of spending a rupee more than can be helped of Indian money outside the country or in unproductive ways within it. A correspondent of the *Liverpool Post*, in a communication to that paper last month, remarks upon the fact that "Indian expenditure is not always exclusively governed by Indian considerations." The greater part of the increased expenditure in recent years, he points out, falls under these heads, a fact which he thinks bears out his statement that "Indian interests are often subordinated to considerations of Imperial expansion, British commerce, and the European services." There can be little question that many economies might and should be practised under each of these heads, and that, by the present policy, an altogether unwarrantable burden is placed on the shoulders of the Indian tax-payer.

ITERANCES OF THE DAY.

LORD CURZON'S DURBAR SPEECH.

The following is the full text of the Speech :—

Five months ago in London His Majesty, King Edward VII, King of England, Emperor of India, was invested with the Crown and Sceptre of the English kings. Only a few representatives of the Indian Empire had the good fortune to be present at the ceremony. To-day His Majesty has, by his Royal favour, afforded an opportunity to all his Indian people to take part in similar rejoicings and here and elsewhere throughout India are gathered together, in honour of the event, the Princes and Chiefs and nobles, who are the pillars of the Throne; the European and Indian officials, who conduct his administration with an integrity and devotion beyond compare; the army, British and Native, which with such pre-eminent bravery defends his frontiers and fights his wars; and the vast body of the loyal inhabitants of India of all races who, amid a thousand varieties of circumstance and feeling and custom, are united in their spontaneous allegiance to the Imperial Crown. It was with the special object of thus solemnising his Coronation in India that His Majesty commanded me, as his Viceroy, to convene this great Durbar, and it is to signify the supreme value that he attaches to the occasion that he has honoured us by deputing his own brother, His Royal Highness the Duke of Connaught, to join in this celebration. It is 26 years since, on the anniversary of this day, in this city of Imperial memories and traditions, and on this very spot, Queen Victoria was proclaimed the first Empress of India. That act was a vindication of her profound interest in her Indian subjects, and of the accomplished unity of her Indian dominions under the paramountcy of the British Crown. To-day, a quarter of a century later, that Empire is not less, but more united. The Sovereign, to whom we are met to render homage, is not less dear to his Indian people, for they have seen his features and heard his voice. He has succeeded to a Throne not only the most illustrious, but the most stable in the world; and ill-informed would be the critic who would deny that not the least of the bases of its security—nay I think, the principal condition of its strength—is the possession of the Indian Empire and the faithful attachment and service of His Majesty's Indian people. Rich in her ancient traditions, India is also rich in the loyalty which has been kindled anew in her by the West. Amid the crowd of noble suitors who through all the centuries have sought her hand, she has given it only to the one who has

also gained her trust. Now here also in the world would such a spectacle be possible as that which we witness here to-day. I do not speak of this great and imposing assemblage, unparalleled as I believe it to be. I refer to that which this gathering symbolises and those to whose feelings it gives expression. Over one hundred rulers of separate States, whose united population amounts to 60 millions of people, and whose territories extend over 55 degrees of longitude, have come here to testify their allegiance to their common Sovereign. We greatly esteem the sentiments of loyalty that have brought them to Delhi from such great distances and often at considerable sacrifice, and I shall presently be honoured by receiving from their own lips their message of personal congratulation to the King. The officers and soldiers present are drawn from a force in India of nearly 230,000 men, whose pride it is that they are the King's Army. The leaders of Indian Society, official and non-official, who are here, are the mouth-pieces of a community of over 230 million souls. In spirit, therefore, and one may almost say, through their rulers and deputies in person, there is represented in this arena nearly one fifth of the entire human race. All are animated by a single feeling, and all bow before a single Throne; and should it be asked how it is that any one sentiment can draw together these vast and scattered forces and make them one, the answer is that loyalty to the Sovereign is synonymous with confidence in the equity and benignity of his rule. It is not merely the expression of an emotion, but the record of an experience and the declaration of a belief, for to the majority of these millions the King's Government has given freedom from invasion and anarchy; to others it has guaranteed their rights and privileges; to others it opens ever-widening avenues of honourable employment; to the masses it dispenses mercy in the hour of suffering, and to all it endeavours to give equal justice, immunity from oppression, and the blessings of enlightenment and peace. To have won such a dominion is a great achievement, to hold it by fair and righteous dealing is a greater; to weld it by prudent statesmanship into a single and compact whole, will be, and is, the greatest of all.

Such are the ideas and aims that are embodied in the summoning of this Coronation Durbar. It is now my duty to read to you the gracious message which His Majesty has desired me to convey to his Indian people :—

"It gives me much pleasure to send a message of greeting to my Indian people on the solemn occasion when they are celebrating my Coronation. Only a small number of the Indian princes and representatives were able to be present at the ceremony which took place in London, and I accordingly instructed my Viceroy and Governor

General, to hold a great Durbar at Delhi in order to afford an opportunity to all the Indian Princes, Chiefs and peoples, and to the officials of my Government, to commemorate this auspicious event. Ever since my visit to India in 1875 I have regarded that country and its peoples with deep affection, and I am conscious of their earnest and loyal devotion to my house and Throne. During recent years many evidences of their attachment have reached me, and my Indian troops have rendered conspicuous services in the wars and victories of my Empire. I confidently hope that my beloved son the Prince of Wales and the Princess of Wales may, before long, be able to see a country which I have, always desired that they should see, and which they are equally anxious to visit. Gladly would I have come to India upon this eventful occasion myself had this been found possible. I have however, sent my dear brother, the Duke of Connaught, who is already so well-known in India, in order that my family may be represented at the ceremony held to celebrate my Coronation. My desire, since I succeeded to the Throne of my revered mother, the late Queen Victoria, the first Empress of India, has been to maintain unimpaired the same principles of humane and equitable administration which secured for her, in so wonderful a degree, the veneration and affection of her Indian subjects. To all my feudatories and subjects throughout India I renew the assurance of my regard for their liberties, of respect for their dignities and rights, of interest in their advancement, and of devotion to their welfare, which are the supreme aim and object of my rule, and which, under the blessing of Almighty God, will lead to the increasing prosperity of my Indian Empire and the greater happiness of its people."

The Viceroy continued :—Princes and peoples of India,—these are the words of the sovereign whose Coronation we are assembled to celebrate. They provide a stimulus and an inspiration to the officers who serve him, and they breathe the lessons of magnanimity and good will to all. To those of us who, like my colleagues and myself, are the direct instrument of His Majesty's Government, they suggest the spirit that should guide our conduct and infuse our administration. Never was there a time when we were more desirous that that Administration should be characterised by generosity and lenience. Those who have suffered much, deserve much, and those who have wrought well, deserve well. The Princes of India have offered us their soldiers and their own swords in the recent campaigns of the Empire, and in other struggles, such as those against drought and famine, they have conducted themselves with equal gallantry and credit. It is difficult to give to them more than they already enjoy, and impossible to add to a security whose inviolability is beyond dispute. Nevertheless, it has been a pleasure to us to propose that Government shall cease to exact any interest for a period of three years upon all loans that have been made or guaranteed by the Government of India to Native States in connection with the last famine. We hope that this benefaction may be acceptable to those to whom it is

offered. Other and more numerous classes there are in this great country to whom we would gladly extend, and to whom we hope before long to be in a position to announce relief. In the midst of a financial year it is not always expedient to make announcements or easy to frame calculations. If, however, the present conditions continue, and if, as we have good reason to believe, we have entered upon a period of prosperity in Indian finance, then I trust that these early years of His Majesty's reign may not pass by without the Government of India being able to demonstrate their feelings of sympathy and regard for the Indian population by measures of financial relief which their patient and loyal conduct in years of depression and distress renders it specially gratifying to me to contemplate. I need not now refer to other acts of consideration or favour which we have associated with the present occasion, since they are recorded elsewhere; but it is my privilege to make the announcement to the officers of the army that henceforward the name of the Indian Staff Corps will cease to exist, and that they will belong to the single and homogeneous Indian Army of the King.

Princes and peoples,—If we turn our gaze for a moment to the future, a great development appears with little doubt to lie before this country.

There is no Indian problem, be it of population, or education, or labour, or subsistence, which it is not in the power of statesmanship to solve; and the solution of many is even now proceeding before our eyes. If the combined arms of Great Britain and India can secure continued peace upon our borders, if unity prevails within them between Princes and people, between European and Indian, and between rulers and ruled; and if the seasons fail not in their bounty, then nothing can arrest the march of progress. The India of the future will, under Providence, not be an India of diminishing plenty, of empty prospect, or of justifiable discontent, but one of expanding industry, of awakened faculties, of increasing prosperity, and of more widely distributed comfort and wealth. I have faith in the conscience and the purpose of my own country, and I believe in the almost illimitable capacities of this but under no other conditions can this future be realised than by the unchallenged supremacy of the paramount Power, and under no other controlling authority is this capable of being maintained than that of the British Crown.

And now I will bring these remarks to a close. It is my earnest hope that this great assemblage may long be remembered by the peoples of India as having brought them into contact, at a moment of great solemnity, with the personality and the sentiments of their Sovereign. I hope that its memories will be those of happiness and rejoicing, and that the reign of King Edward VII, so auspiciously begun, will live in the hearts of its people. We pray that under the blessing of the Almighty Ruler of the Universe, his Sovereignty and power may last for long years; that the well-being of his subjects may grow from day to day; that the administration of his empire may be stamped with wisdom and virtue; and that his security and beneficence of his dominion may endure forever. Long live the King-Emperor of India.

THE AGA KHAN ON INDIAN MOSLEMS.

The following is the full text of the speech delivered by H. H. Aga Khan as President of the Muhammadan Educational Conference which held its sittings at Delhi in the last week of December.

We are undertaking a formidable task when we attempt to correct and remodel the ideals of our people. But for the task before us, we Indian Mussalmans possess many advantages; we have the advantage of living under a Government which administers justice evenly between rich and poor and between persons of different creeds and class; in the second place, we enjoy complete freedom to devise plans for the amelioration of our people. We have no reason to fear that our deliberations will be abruptly closed if we propose schemes of education other than those approved by Government. We know that no book and no branch of knowledge will be forbidden to us by official command; and lastly, we know that under the protection of British rule, we shall be allowed to work out to the end any plans for social and economic salvation which we may devise. Our wealth will not excite rapacity, nor our advancement in learning awaken the jealousy of our rulers. More than all this, we are members of a polity in which the opportunities for advancement in wealth and learning are greater, perhaps, than in any country in Asia, if only we have the energy and wisdom to make a right use of those opportunities.

These are privileges which our co-religionists in Turkey or Persia, who are not British subjects, do not possess. We, Moslems of India, enjoy unparalleled advantages, and we occupy among our co-religionists a unique position, and, if we properly utilise them and realise our duties, we ought to lead the way and constitute ourselves the vanguard of Islamic progress throughout the world. But we, who live beneath the liberal rule of England, have here all the chances that a people require of developing our own individuality according to our own ideas.

And now, gentlemen, let us direct our attention to a question with which your Conference is intimately concerned, namely, how have the Indian Moslems taken advantage of the chances which Providence has placed in their way? We must all acknowledge with shame and regret that so far we have failed. We have neglected industry and commerce, just as we have neglected every other opportunity of progress.

This general apathy which pervades every walk of life is the sign of a moral disease, and what I will ask you to consider with me to-day are the causes of this terrible disease, and I will especially

invite your attention to this point. Are the causes of this disease, to use a medical phrase, congenital and necessary, *i. e.*, are they part of the faith or are they accidental and acquired? That this disease is accidental and no necessary development of the faith is shown not only by the political progress made by Islam during the first 25 years of the Hijra, but by the high standard of duty, morality, truthfulness, justice and charity that was general in Arabian society during the glorious reigns of Abu Bakr and Omar.

All this shows that Islam does not necessarily lead to apathy and want of devotion to duty. We must, therefore, consider what the real causes are of this supineness which we are compelled to recognise as universal in Moslem society of to-day, a supineness all the more remarkable under the benign rule of England, where a little self-sacrifice would enable us to achieve greatness; for true greatness in modern times consists in pre-eminence in learning, wealth and intelligence, and such pre-eminence we might attain with constant effort. I believe that this disease cannot be assigned to any one single cause, but I will, with your permission, enumerate four causes which, in my judgment, have had a paramount influence in introducing this apathy, this moral torpor, into Moslem society; and you will notice that all the causes of which I speak have been in operation for a very long time.

For the first cause I must go back to the very early days of our faith. The most genuine and the most moral of Moslems often tell you, as they have a thousand times told me, almost in identical terms at Constantinople or Cairo, at Bombay or Zanzibar, that as long as they spend their energies in prayer and pilgrimage they are certain that though they do not do the best, yet they do no harm, and thus they give up to prayer and pilgrimage the lines which should have been devoted to the well-being of their people.

It is to this class in India that I appeal and desire most earnestly to impress upon them my conviction that if they continue in their present attitude of aloofness, it means the certain extinction of Islam, at least, as a world-wide religion. We of this Conference appeal to the pious for their co-operation and assistance, and we warn them solemnly and in all earnestness, that if they give all their time to prayer and their money to pilgrimages, the time will come when that piety, which they so highly prize, will pass away from our society and (for want of timely assistance at this most critical period) not one of our descendants will know how to pray or put any store upon the merit of pilgrimage. In the strenuous life

of modern times, a people that does not get help from its most pious and most moral sections has as little chance of success as a man who tries to swim with his arms tied behind his back. A great, but silent, crisis has come in the fortunes of Islam, and unless this class wake up to the altered conditions of life and to the necessity of superintending and educating the rising generation, the very existence of Islam is at stake. The example of the Prophet and of Abu Bakr and Omar and Ali should convince these pious people that the first duty of a Moslem is to give his time to the service of his nation and not merely to silent prayers.

A second cause of our present apathy is the terrible position of Moslem women due to the Zeyana and Purdah system. There is absolutely nothing in Islam, or the Koran, or the example of the first two centuries to justify this terrible and cancerous growth that has for nearly a thousand years eaten into the very vitals of Islamic society.

This terrible cancer that has grown since the 3rd and 4th century of the Hijra must either be cut out, or the body of Moslem society will be poisoned to death by the permanent waste of all the women of the nation.

The fourth cause of the general apathy of modern times which we are considering, is undoubtedly due to the doctrine of necessity. No fair or reasonable-minded person who has read the Koran can for a moment doubt that freedom of the will and individual human responsibility is there insisted upon, but Abul Hassan Alashari has placed the stamp of his unfortunately misapplied but great genius on Islam and given to Moslem thought that fatal fatalism which discourages effort and which has undoubtedly been one of the principal causes of the non-progressive spirit of modern Islam. It is the fashion to place all the responsibility for the downfall of Islam to Chengiz and the Tartar invasion.

But in my humble opinion—an opinion held also by many of the most learned who have given the matter a serious study—it was, first, the bad example and selfishness of the Abbassides; secondly, the fatal system of modern Purdah with its restrictions on the intellectual development of the women; thirdly, the constant and silent withdrawal of the most pious and moral Moslems into a life of private prayer and devotion; and lastly, this doctrine of necessity, that brought about our downfall. How low we have fallen, one can easily find out by comparing Moslem general intelligence of to-day to that which exists even in the most backward of Slavonic-European States. If, then, we are really in earnest in deploring the fallen condition of our people, we must unite in an effort for their redemption, and

first and foremost of all, an effort must now be made for the foundation of a University where Moslem youths can get, in addition to modern sciences, a knowledge of their glorious past and religion, and where the whole atmosphere of the place (it being a residential Varsity) may, like Oxford, give more attention to character than mere examinations. Moreover, Moslems in India have legitimate interests in the intellectual development of their co-religionists in Turkey, Persia, Afghanistan and elsewhere, and the best way of helping them is by making Aligarh a Moslem Oxford where they can all send their best students not only to learn the modern sciences, but, that honesty and self-sacrifice which distinguished the Moslems of the first century of the Hijra.

The sum which we ask for is one crore of rupees, for we propose to establish an institution capable of dealing with the enormous interests involved; we want to be able to give our Moslem youths not merely the finest education that can be given in India, but a training equal to that which can be given in any country in the world. We do not wish that in future our Moslem students should be obliged to go to England or Germany if they wish to obtain real eminence in any branch of learning or scholarship, or in the higher branches of industrial and technical learning. Now, we want Aligarh to be such a home of learning as to command the same respect of scholars as Berlin or Oxford, Lepsic or Paris. And we want those branches of Moslem learning, which are, too fast passing into decay, to be added by Moslem scholars to the stock of the world's knowledge. And, above all, we want to create for our people an intellectual and moral capital; a city which shall be the home of elevated ideas and pure ideals; a centre from which light and guidance shall be diffused among the Moslems of India, aye, and out of India, too and which have held up to the world a noble standard of the justice and virtue and purity of our beloved faith. Gentlemen, do you think that the restoration of the glory of Islam would be too dear at one crore of rupees? If you really care for that noble faith which you all profess, you can afford the price. Why, if the Moslems of to-day did their duty as did the Moslems of the first century, in three months you would collect this money to pay for the ransom of Islam. Bethink you that there are in India 60 million Moslems and of these at least 10 million or one crore, can afford one rupee apiece; from the head of every Moslem family we only ask for one rupee whereas we all know well that there are people who can pay Rs. 1,000 or Rs. 10,000 with ease.

DR. BHANDARKAR ON SOCIAL REFORM.

The following is the Presidential address delivered by Dr. Bhandarkar at the Indian Social Conference held last month.

LADIES AND GENTLEMEN,

Yesterday you had a glowing and attractive picture placed before you. To-day it is our business to see whether the canvass on which the picture is to be painted is torn and tattered and cannot hold it or of a weak texture and cannot retain it for long. If it be of either nature, we have to see how it can be repaired and strengthened so that it may answer our purpose. Dropping all metaphor, I may say that the object of social reform is to eradicate such evil customs as have undermined the energies of the Indian people and prevent the free expansion of their powers and capacities. The three hundred millions of the population of India are divided into about 5,000 different communities which are called castes and between which there is no intimate social intercourse. The spirit of caste pride has come into free play and jealousies and discussions are the result. No sincere co-operation can be expected under the circumstances. Some of the communities are so small that it is difficult to secure husbands for women and wives for men. And often unsuitable matches have to be formed. And this is, in too many instances, the case in the province of Gujarat where stories of girls of inferior castes being brought from Kathiawad and palmed off on intending bridegrooms as belonging to their caste are not uncommon. The lower castes are in a very depressed condition; no education is available to them. Even their touch is considered abomination and to improve their social condition they often change their religion and become Christians. The women of the country are, as a rule, not educated, thus leading to, what may be called, a waste of half the moral and intellectual resources of the country, a waste for which there can be no compensation anywhere. Boys and girls, especially the latter, are married at a very early age; and this must necessarily lead to the degeneration of the race; and the education of girls stops when they arrive at about the age of twelve. Girl-widows are condemned to a life of misery and often immorality; and a Society that connives at this condition of things must become demoralised to a certain extent. Travelling to foreign countries is prohibited; and thus there is no scope for the development of the enterprising spirit of the people. If, therefore, in the present keen competition between the nations, our people are to

have a fresh start, a strong fight will have to be made against these and such other customs.

SOCIAL REFORM, A NATIONAL MOVEMENT.

This has been my creed since the year 1853; I gave expression to it at Sholapur by laying stress on the national significance of social reform, and I thought it was the creed of all social reformers. I was not aware that I was uttering anything new and was surprised to find that I was so regarded in some quarters. I can have nothing to say to those who expressed an approval; but there were some people, I am told, who regarded widow marriage, for instance, as called for only for the removal of the misery of the widow girls and had no connection whatever with national interests. According to these men the removal of misery of certain creatures is the object of social reform. The acquisition of social facilities for foreign travel is sought for by the social reformer, but the removal of existing misery cannot be its object. So also in a very large number of cases; caste distinctions do not create misery, yet the social reformer seeks to obliterate them. The old Buddhists, especially of Northern India, constituted benevolence as one of the cardinal principles of their conduct. They even sacrificed their lives to promote the good of others; but they did not seek systematically to abolish caste, though amongst themselves the Buddhist monks paid no heed whatever to it. I, however, do not mean to say that sympathy for the sufferings of others is not a motive in itself. In fact, it is the highest motive, and the world has now begun to move towards its realisation, though, I am afraid, there is more talk about it than actual work, as is shown by the manner in which President Roosevelt's attempts to be just and impartial to the Negroes in the United States have been received. But if mere sympathy for the sufferings of others is the object of social reform why should we confine our efforts, to the Indians, and why not extend them to the Chinese or Europeans? Practically, therefore, we have to restrict the operation of this high motive to the people of India, so that, from this point of view even, social reform becomes a national movement.

TIME IS NO FORCE.

Now, some people there are who believe in the natural operation of the causes which have come into existence and declare deliberate social reform not only unnecessary but harmful, and agitation such as is conducted by this Conference and Social Reform Associations to be mischievous. The causes that have come into operation are our contact with Western nations, the English education we receive at schools and colleges, English

law and policy which make no distinction between a Brahman and a Shudra, railways which compel a holy Brahman to sit side by side with a low caste man in a third class compartment the increase of population consequent on *Paz Brittanica* which is driving even Brahmans to resort to the profession of stone-masons, tailors, weavers and so forth. These have no doubt been changing our manners, but their operation must cease with the satisfaction of the immediate need, and it cannot give us systematic reform. Besides, if social reform were left to the natural operation of these causes, you cannot trust to the process always yielding rational results. The changes that our present circumstances are calculated to produce may be good or may be bad. The expression that is often used in connection with this view is that time will work out the necessary changes. But time is no force; it is simply a category of the understanding to distinguish one event from another. The real force comes from human motives which are invoked by the circumstances in which men find themselves. If, therefore, time works out changes, it must be by the force of human motives. And as the lower motives are always more powerful than the higher ones though these are nobler in their nature, when you leave things to take their own course the changes that will be effected will be such as the lower motives of man bring about; that is to say, the changes will not always be good or rational. In order, therefore, that the changes which our present circumstances or the causes indicated above are likely to produce, may be good or rational it is necessary to discuss and decide which we will have and which not. In other words, social changes must not be left to work themselves out, but should always be under the guidances of our reason and moral sense.

WITHOUT THE CONTROL OF REASON.

Our previous history is full of examples in which, when things were left to themselves the changes that were effected were irrational and immoral. Some of you know that the authors of our *Smritis* or lawbooks enumerate twelve kinds of sons who succeed their father. One of these is *Karina* or the son of a virgin that was begotten before a girl was married and who in some cases was regarded as the son of her father, and by some as the son of the husband whom she subsequently married. This shows that when the practice of marrying girls at a mature age prevailed some of them went wrong. And in all likelihood it was to serve this evil that the practice of marrying girls at an early age came into existence. Some of the old *Bhis* lay down the ritual of marriage on the

supposition that the bride was a grown-up girl; others after laying down the general rule add "it would be better to marry a girl before maturity." There are still others who did not approve of this new practice that was coming in, and laid down in express terms that only a mature girl should be married. So far the new change was not beyond the control of reason. But that control was soon lost; and it went on spreading over a wider area. The possibility of a girl going wrong before maturity was alone looked to and gradually early marriage became a stereotyped custom without reference to the reason that ushered it in; and the limit of age became lower and lower until now a child even a few months old is sometimes married. Thus, then, this change was not under the guidance and control of reason and was left to work itself out. The manifest evils of early marriage were entirely lost sight of, and early marriage came to be firmly rooted. Similarly the original motive that eventually led to female infanticide and the marriage of about a hundred girls or more to one man was not bad. That motive was the anxiety of parents to marry their girls into respectable families. But this was not under the guidance of reason; and parents killed their daughters to avoid the disgrace of marrying them into low families or wedded them to husbands that saw them only once in their life. Similarly, a too nice regard for female chastity not of the moral but physical kind led to the prescription of widow-marriage, and no regard whatever was paid to the evil consequences which have come so glaringly under our observation. And the innumerable castes that we find at present owe their existence to the feeling of exclusiveness working itself out unchecked by national considerations. This is the result, then, when we allow certain influences to work themselves out and do not subject them to criticism at each step, and arrest their operation when it oversteps the bounds of reason. It will, therefore, not do to trust to the new circumstances in which we find ourselves now, to eradicate the prevailing evil customs. There must be discussion and decision and deliberate plans for the introduction of such changes only as are good and rational.

The reform movements that are going on have a twofold object, viz., deliberate eradication of the prevailing evils and the prevention of others that the new causes which have come into operation may bring about if left to work silently. For the present, the first object is more important; but as I stated at Sholapur, we have not been able to do very much toward its accomplishment. A European friend recently wrote to me that from all he had observed, it appeared to him that there was no strong force at the back of the reform

movement; and we must acknowledge that this is true, looking to the persevering and energetic efforts and exertions made by Europeans whenever they have to introduce a reform. Most of us have read Morley's Life of Cobden. Can we say that our exertions can at all be compared with those, which that great man and his co-adjutor Mr. Bright, went through, to convince people of the injustice of the Corn Laws? And the number of our people is so large and they are so impervious to ordinary influence, and the social practices we have to eradicate are so many that more persistent efforts than those of Cobden and Bright must be made by resolute men in all parts of the country to bring even a small minority of the people to the conviction that those practices are baneful. Since like the Corn Laws, our agitation is not to culminate in legislation that will compel action, we must begin by introducing our doctrines into practice ourselves. Often times the reproach has been cast at the Social Conference that there is any amount of talking there but very little action; and a danger which is likely to arise from inaction is, that it will become a simple matter of routine with us to speak of matters of social reform and for others to hear us and becoming callous we shall cease to be really enthusiastic about it ourselves. All this you will, I hope, bear seriously in mind. As I stated at Sholapur, we should form associations wherever we can; there should be lectures, discussions, pamphlets and leaflets; and we should have a public opinion amongst ourselves which will prevent backsliding. A large amount of money will also be wanted. But the question is "are there such resolute men amongst us who will work in the manner in which Cobden and Bright worked to bring about a reform in the Corn Laws?" If we have, or if we shall have it not now, then only; in my opinion, the future interests of our country are safe; and if no such men arise our future must indeed be gloomy. As to the second object of the Social reform movement *vis.*, keeping the influences now at work under the guidance and control of reason, a spirit of fair criticism prompted solely by the love of our country must be developed by us. Whenever any evil principle finds introduction into society or a good principle is carried to excess, criticism ought to be brought to bear on it. For instance, it cannot be denied that the spread of the vice of drunkenness amongst the higher castes is due to the circumstances in which we find ourselves. The Social Conference and social reformers generally ought to condemn the practice in no measured terms. Again, there are persons amongst us who secretly violate the rules of castes as regards eating and drinking

but outwardly pose as orthodox persons. If the number of such men goes on increasing, demoralisation of Indian society must inevitably be the result. This also must be fearlessly criticised, if we have any regard for our future good. In this manner, as we go on, other evils hitherto unheard of may come into existence and the only remedy I can think of is that a regard for national interest must grow up amongst us and we should endeavour to do all that is possible to prevent the growth of any evil arising from these circumstances.

IS THIS PESSIMISM?

I am afraid in consequence of the remarks I have now made some of you will again call me a pessimist or at least say that a pessimistic tone pervades my observations. I am myself unable to see the justification of this title or of this view. I have never said that there is nothing good in us Hindus, or that we are not capable of rising; nor have I said that we have done nothing in matters of reform. Though at Sholapur I stated that in our history we Hindus as a whole have shown no concern for national or corporate interests or were not actuated by the national spirit or sentiment and consequently allowed ourselves to be conquered by foreigners, still I did not say that the spirit of our military classes was ever permanently crushed or that the learned, priestly, mercantile and other classes lost their peculiar excellences. After the Sakas, Yavans, Palhaas and Kushans had governed a large portion of the country for three or four centuries, a Hindu dynasty of Guptas rose to power and establish itself over the whole of Northern India. The foreigners were driven out by Chundragupta otherwise called Vikramaditya, the most famous prince of the dynasty. The occasion was seized by the Brahmins to regain the power over the people which they had lost through the influence of yearly Buddhism and according to their lights put the social system in order by remodelling their laws and institutions. The Hunas or Huns who held power for some time in the country were put down by a prince of the name of Yasodhaman who ruled over North-Western Malva and Rajputana. In modern times, Hindu domination was restored by the Sikhs in the north and the Marathas in the south. In very early times, when the Aryans spread over the different parts of Northern India they appear to have had an aristocratic form of Government in some instances at least. In the time of Budha, while Magadha was governed by a prince and was an absolute monarchy the Vajjis, or Vrijis, the Kshattriya inhabitants of a neighbouring province formed a republic. Such other republics are also spoken of. And the system of giving to the

provinces in which certain Kshattriya tribes had settled the name of the tribe itself must have originated from the fact of their being joint owners of the provinces i.e., having a republican form of Government. Thus the country in which Panchalas lived was called Panchala, and that in which Kuravas lived Kuravas. In Western countries these aristocratic republics became democracies and existed as such for a long time and political ideas and institutions were highly developed. In India they soon became absolute monarchies and ever remained as such and the political growth of the country was arrested. To this result ecclesiastical absolutism that was established at the same time also contributed since it checked freedom of thought and action. You will thus see that I do not and cannot deny us the capacity for assimilating the national sentiment and working for the promotion of national interests. But the progress we have made during the last sixty years since we became subject to the new influences, and in Bengal during the last 150 years has not been considerable, as I have shown in the Sholapur address. One cannot help coming to this conclusion when one carefully observes what is going on about one. If for declaring this openly one is to be called a pessimist, verily truth itself is pessimistic and I believe it will do us good if rough pessimistic truth were dinned into one's ears instead of smooth optimistic falsehood. The former will rouse us to action, the latter will send us to sleep again though there is no question the new causes that come into operation have awakened us. Consider for a moment how the Japanese have completely transformed themselves within the short space of 35 years. A Japanese scholar whom I met in Poona a few days ago told me that before the transformation took place, i.e., 35 years ago, there was no connubium or intermarriages between the military and mercantile classes; but now this distinction has been obliterated. The Japanese are a unique people, and I do not think it is possible for us to make progress at their rate; but still during the twice and five times as many years that we have been under the same influences as they—not the same I should say, but under far stronger and better influences, since we have been positively receiving education at the hands of a European nation, we might be expected to drop the conubial distinction between at least the minor subdivisions of the same caste. But we have not done it. Now, gentlemen, believe me when I say that I do not feel offended in the least when a pessimistic tone is discovered in my remarks, but what I want to drive out by referring to this matter is that our people have somehow become fond of

praise. They even allow themselves to be misled by certain foreigners who indulge them lavishly with it. For progress what is wanted is discontent with the present condition and praise bestowed upon us and believed in by us is calculated to make us self-satisfied and unwilling to make an effort to rise. It is to warn my hearers of this weakness that I have alluded to the matter.

In conclusion, allow me to remind you that the great discovery of the nineteenth century—the law of evolution—is receiving confirmation from every side. The law implies that there has been throughout the universe a progress in the material as well as the spiritual world from the simple to the complex, from the dead to the living from good to better, from the irrational to the rational. This is the law of God, and if, instead of obstinately clinging to what is bad and irrational we move forwards to what is good and rational we shall be obeying the law of the universe and co-operating with God. If, however, we continue to go down from what is bad to what is worse, from good to bad and from the rational to the irrational as we have been doing for so many centuries, we shall have to seek another universe to live in.

THE VICEROY ON THE INDUSTRIAL DEVELOPMENT OF INDIA.

Speaking at Sitarampur, His Excellency the Viceroy gave a humorous account of his coal-mining experiences, and went on to express his interest in the coal-mining industry of India and his belief in its future. This future he saw rather in the development of industrial enterprise than in the prospects of an export trade, though the latter were also promising. The coal trade and the industrial exploitation of India, he said, are two phases of the same problem. "Develop the industries," he said, "and there will then be a field for coal." He added:—

"I am one of those who are sanguine about the industrial future that lies before this country. I think that the capacities of India, either hidden beneath the soil or latent in the industry and ingenuity of its artisans, deserve and will attain great development. I do not say that we shall ever become a great manufacturing country in the sense in which many European countries merit that name. Our conditions preclude it; but I do hope that India will become much more of a self-providing country than she now is, manufacturing out of her own materials and with her own workmen a great deal that she now imports from abroad. And, if I am right, and if anyhow the future lies before her, then assuredly one of the first conditions of success is already at her hand in the possession of extensive and accessible coalfields such as those which I am visiting to-day, and which, in a short time, have attained so wide a fame."

Industrial and Commercial Section.

THE VICEROY ON THE DELHI ARTS EXHIBITION.

His Excellency the Viceroy, in declaring the Fine Arts Exhibition open, delivered the following address :—

Your Royal Highnesses, Your Highnesses, Ladies, and Gentlemen.—It is now my pleasant duty to proceed to the first of the functions of the present fortnight and to declare open the Delhi Art Exhibition. A good many of our visitors would scarcely believe that almost everything that we see before us, except the trees, is the creation of the last eight months. When I came here in April last to select the site there was not a trace of this great building, of these terraces, and of all these amenities that we now see around. They have all sprung into existence for the sake of this Exhibition, and though the effects of the Exhibition will, I hope, not be so quickly wiped out, the *mise-en-scène* is, I am sorry to say, destined to disappear.

Perhaps you will expect me to say a few words about the circumstances in which this Exhibition started into being. Ever since I have been in India I have made a careful study of the art industries and handicrafts of this country, once so famous and beautiful, and I have lamented, as many others have done, their progressive deterioration and decline. When it was settled that we were to hold this great gathering at Delhi, at which there would be assembled representatives of every Province and State in India, Indian Princes and Chiefs and Nobles, high officials, native gentlemen and visitors from all parts of the globe, it struck me that here at last was the long-sought opportunity of doing something to resuscitate these threatened handicrafts, to show to the world of what India is still capable, and, if possible, to arrest the process of decay. I accordingly sent Dr. Watt, and I appointed him my right hand for the purpose. Far and wide throughout India have he and his assistant, Mr. Percy Brown, proceeded, travelling thousands of miles everywhere, interviewing the artisans, selecting specimens, giving orders where necessary, supplying models and advancing money to those who needed it.

THE THREE CONDITIONS.

Three conditions I laid down to be observed like the laws of the Medes and Persians. First, I stipulated that this was to be an Arts Exhibition and nothing else. We

could easily have given you a wonderful show illustrating the industrial and economic development of India. Dr. Watt has such an exhibition—and a very good one too—at Calcutta. We could have shown you timbers and minerals and raw stuffs and hides and manufactured articles to any extent that you pleased. It would all have been very satisfying, but also very ugly; but I did not want that. I did not mean this to be an Industrial or Economic Exhibition. I meant it to be an Arts Exhibition—and that only.

THE SECOND CONDITION.

My second condition was that I would not have anything European or quasi-European in it. I declined to admit any of those horrible objects, such as lamps on gorgeous pedestals, coloured glass lustres or fantastic statuettes that find such a surprising vogue among certain classes in this country, but that are bad anywhere in the world and worst of all in India, which has an Art of its own. I laid down that I wanted only the work that represented India's trade, traditions, instincts, and beliefs of the people. It is possible that a few articles that do not answer to my definition may have crept in because the process of Europeanisation is going on apace in this country, and the number of teapots, cream jugs, napkin rings, salt-cellars and cigarette-cases that the Indian artisan is called upon to turn out is appalling, but generally speaking my condition has been observed.

THE THIRD CONDITION.

Then my third condition was that I would only have the best. I did not want cheap cottons and waxwork, vulgar lacquer, trinkets and tinsel, brass gods and cows made to order in Birmingham, or perhaps made in Birmingham itself. What I desired was an Exhibition of all that is rare, characteristic or beautiful in Indian Art—our gold and silver ware, our metal work and enamel and jewellery, our carving in wood and ivory and stone, our best pottery and tiles, our carpets of old Oriental patterns, our muslins and silks and embroideries, and that incomparable Indian brocade. All of these you will see inside this building. But please remember it is not a Bazaar, but an Exhibition. Our object has been to encourage and revive good work not to satisfy the requirements of the thinly-lined purse. Such is the general character of the Exhibition.

THE LOAN COLLECTION.

But we have added to it something much more important. Conscious that the taste is declining and that many of our modern models are debased and bad,

have endeavoured to set up alongside the products of the present, the standards and samples of the past. This is the meaning of the Loan Collection which has a hall to itself, in which you will see many beautiful specimens of old Indian art-ware lent to us by the generosity of Indian Chiefs and connoisseurs, some of it coming from our own Indian museums and some from the unrivalled collection in the South Kensington Museum in London. Many of these objects are beautiful in themselves, but we hope that the Indian workmen who are here, and also the patrons who employ them, will study them, not merely as objects of antiquarian or even artistic interest, but as supplying them with fresh or rather resuscitated ideas, which may be useful to them in inspiring their own work in the future. For this may be laid down as a truism that Indian Art will never be revived by borrowing foreign ideals but only by fidelity to its own.

THE OBJECTS OF THE EXHIBITION.

And now I may be asked what is the object of this Exhibition and what good do I expect to result from it? I will answer in a very few words. In so far as the decline of the Indian Arts represents the ascendancy of commercialism, the superiority of steam power to hand power, the triumph of the test of utility over that of taste, then I have not much hope. We are witnessing in India only one aspect of a process that is going on throughout the world that has long ago extinguished the old manual industries of England, and that is rapidly extinguishing those of China and Japan. That nothing can stop. The power loom will drive out the hand loom and the factory will get the better of the workshop just as surely as the steam car is superseding and as the hand pulled punkha is being replaced by the electric fan. All that is inevitable, and in an age which wants things cheap and does not mind their being ugly, which cares a good deal for comfort and not much for beauty, and which is never happy unless it is deserting its own models and traditions and running about in quest of something foreign and strange. We may be certain that a great many of the old arts and handicrafts are doomed.

THE PRESERVATION OF INDIAN ART.

There is another symptom that to my mind is even more ominous. I am one of those, as I have said, who believe that no national art is capable of continued existence unless it satisfies the Indians and expresses the wants of the nation that has produced it. No art can be kept alive by globetrotters or curiohunters alone. If it has got to that point it becomes a mere mechanical reproduction of cer-

tain fashionable patterns, and when the fashion changes and they cease to be popular, it dies. An appeal to Indian Chiefs if Indian art therefore is to continue to flourish or is to be revived it can only be if the Indian chiefs and aristocracy and people of culture and high degree undertake to patronise it. So long as they prefer to fill their palaces with flaming Brussels carpets, with Tottenham Court Road furniture, with cheap Italian mosaics, with French oleographs, with Austrian lustres and with German tissues and cheap brocades, I fear there is not much hope. I speak in no terms of reproach, because I think that in England we are just as bad in our pursuit of anything that takes our fancy in foreign lands; but I do say that if Indian arts and handicrafts are to be kept alive it can never be by outside patronage alone. It can only be because they find a market within the country and express the ideas and culture of its people. I should like to see a movement spring up among the Indian chiefs and nobility for the expurgation or, at any rate, the purification of modern tastes and for a reversion to the old fashioned but exquisite styles and patterns of their country. Some day I have not a doubt that it will come, but it may then be too late.

If these are the omens, what then is the aim of this Exhibition, and what purpose do I think that it will serve? I can answer in a word. The Exhibition is intended as an object lesson. It is meant to show that India can still imagine, and create and do. It is meant to show that the artistic sense is not dead among its workmen, but that all they want is a little stimulus and encouragement. It is meant to show that for the beautification of an Indian house or the furniture of an Indian home there is no need to rush to the European shops at Calcutta or Bombay, but that in almost every Indian state and province, in most Indian towns, and in many Indian villages there still survives the art and there still exist the artificers who can satisfy the artistic as well as the utilitarian tastes of their countrymen and who are competent to keep alive this precious inheritance that we have received from the past. It is with this object that Dr. Watt and I have laboured in creating this exhibition, and in now declaring it open it only remains for me to express the earnest hope that it may in some measure fulfil the strictly patriotic purpose for which it has been designed.

The interesting observations of the Hon. Babu Surendra Nath Bannerji made in the course of his Congress Presidential address at Ahmedabad on "The Decline of Indian Industries" will appear in full in our next number.

PROFIT IN PLANTAINS.

An interesting article in a recent issue of the *Indian Planter's Gazette*, written by an "Expert," drew attention to some remarkable statistics of the profits to be obtained from the fruit of the plantain as grown in Bengal.

The writer, we notice, altogether condemns the native method of cutting the bunches before they are ripe, attributing to that habit the insipid and tasteless fruit that is so often obtained. But it is rather with the figures of profit and loss as given by "Expert" that we are now concerned than with the methods of planting, cultivating and tending the plant. He estimates the yearly crop that one might expect to pick off one *bigha* of land—equal to a third of an acre—to be 350 bunches, which should be sold at an average of 8 as. a bunch. The gross income, therefore, for a period of 10 years would be Rs. 1,750 while the total expenditure for rent, preparing the land, manuring, ploughing, planting and upkeep, is put down at Rs. 694-13 exact. So the net profits on one *bigha* of land would amount to Rs. 1,055-3, which works out at an annual profit of about £ 20 per acre.

Besides the question of profit as a fruit, "Expert" says, that bananas are valuable for their leaves and stalk. He does not mention fibre, but he says that the former when dried and burnt give a valuable alkaline, while the latter are a most useful adjunct to paper making, and always command a good price. The ashes or alkaline from the burnt leaves is generally used for manuring the plants, but if there be any excess, it is readily bought up by the local soap-makers. Attention was recently called in our columns to the value of fibre made from the stalks and sheaths of the common plantain, which are usually thrown away after being burned. Mr. V. T. Vencataraman Iyer, who went to the trouble and expense of having some samples of fibre that he extracted from his plantains valued in London, found it to be worth from £ 25 to £ 35 a ton. The same enterprising gentleman estimated the cost of extracting the fibre to be Rs. 55 per ton locally, and a further sum of Rs. 35 necessary for putting on the market, or Rs. 90 altogether. He reckoned that the amount of fibre to be obtained from one acre of plantains would be about one ton but to get the best results he recommended that considerable areas should be planted. It will thus be seen that a plantain estate should also yield over £ 20 an acre for its fibre alone.

Altogether, it would appear that there are few better speculations for a small capitalist than plantains, whether grown for fruit or for fibre or for both. *The Madras Mail.*

USES OF COCOANUT.

(From the *Indian Municipal Journal*.)

MESSRS. LODERS & NUCOLINES, to whose huge factory in Silvertown, for preparing cocoanut butter, we referred in previous articles, have sent us the following circular in connection with their industry. They are of opinion with regard to the manufacture of the product just referred to in India that the great expense which would be necessary for cooling the oil to make it amenable to treatment would make the production far more expensive than the cost of forwarding to a more temperate climate for treatment. We might state in this connection that a Parsi gentleman from Bombay, has, in co-operation with some friends, started a cocoanut butter factory in England. The circular says:—

It is astonishing how much prominence has been given by the English Press both in the daily papers and in the scientific journals recently to the question of refining the butter obtained from cocoanuts, as if it were an entirely new discovery. The idea evidently arose from a report of the British Consul-General at Marseilles that a new fatty substance is about to be placed on the British market by a firm of oil refiners in Marseilles. It appears that even Consul Harris, the American Consul of Mannheim, Germany, also fell into the same error that the utilization of the fat of cocoanuts is a new industry. He has a long report on the subject which was recently issued by him to his Government. One and all admit that the fat is most valuable, but it has evidently been overlooked that this industry is already of considerable importance in England, seeing that at Silvertown, London, a patented process for the utilization of cocoanut fat has been in use for upwards of ten years by Loders & Nucolines, Limited, and has developed to such an extent that an additional factory was recently acquired in Liverpool.

The kernels of cocoanuts contain a very large proportion of fat (about 60 per cent.), which when freshly extracted is of white colour and has a slight but agreeable nutty flavour. The freshly extracted fat is used for cooking purposes in place of butter and lard by millions of natives in the East and other tropical climates, and the refined fat is much appreciated by Mahomedans, Jews and Vegetarians, who prefer vegetable fat to margarine or animal fat.

Unfortunately after extraction Cocoanut Butter develops free acid, and consequently turns rancid very rapidly; hence in its natural state it must be used whilst fresh. Messrs. Loders & Nucolines' patented process referred to, completely overcomes this difficulty by removing the unpleasant flavour and rank smell attaching to stale Cocoanut Butter, and by doing so have produced a very fine edible fat called "Nucoline."

From cocoanuts another very important product is obtained, viz., a substitute for Cocoa Butter. Formerly it was quite a common thing to find floating on the top of a cup of cocoa a quantity of fat which was the natural fat from the cocoa bean and known as Cocoa Butter, and must not

be confused with Coconut Butter, but the vast extension of the chocolate trade in the United Kingdom created a greater demand for Cocoa Butter, and it was found more profitable to extract the fat from the cocoa by hydraulic pressure before selling it to the public as a beverage. Cocoa Butter now commands a price of about 1s. 5d. per lb. and is a dutiable article bearing a duty of 1d. per lb., when imported into the United Kingdom. It was discovered some years ago that Coconut Butter could be dealt with in a similar manner, and a splendid substitute for Cocoa Butter is obtained, "Nucoa" being the registered trade name under which it is sold. It can be imagined that manufacturing confectioners have found very extensive use for this product, seeing that all chocolates contain 20 to 30 per cent. of fat. "Nucoa" is also more nutritious and digestible than Cocoa Butter. On this case there is some truth in the old saying that "There is nothing new under the sun," and we are glad to be able to correct any possible misunderstanding to which former statements may have given rise that the Germans and French are ahead of us in this particular industry. Considerably more Coconut Butter is made and sold in England than by the whole of the factories manufacturing this article on the Continent and America combined, and we hope that English firms may be permitted to hold this lead of what bids fair to be an extensive industry in the near future.

The coconut is utilized entirely—the fibre from the husk being used for coconut mats, matting and brushes; the shell is used for fuel, and the cake which remains in the hydraulic press, after squeezing out all the oil is a valuable feeding cake for cattle, whilst the dreg which is extracted in the refining of the oil is very largely used for making soap and candles.

COCOANUT KERNEL, CAKE, AND MEAL.

The nutrient ratio of this kernel is 1 : 16. The fresh nut, it will be seen, contains nearly 36 per cent. of oil, in addition to 8 per cent. of sugar and 5.5 per cent. of albuminoids. In the ordinary process of manufacture the greater part of the oil is extracted and a residue obtained known as cocoanut oil cake. This substance in common with several other 'cakes' obtained from oily seeds such as cotton seed, linseed, ground-nut, etc., has a high nutritive value.

'Cocoanut oil cake meal is another much valued concentrated food, and is finding more favour every year with the dairymen of California. While not rating as high in flesh formers as either linseed or cotton seed meal, it appears in many cases to be more relished by the animals.'

Prof. W.A. Henry in his recently published book *Feeds and Feeding*, gives a summary of an interesting experiment made by the French War Department as to the value of cocoanut meal for horses. 'The results proved that cocoanut meal was equal and even superior to the same weight of oats.'

THE TANNING INDUSTRY OF MADRAS.

At the meeting of the Madras Legislative Council held on the 14th December, the Hon. Mr. P. Ratnasabapathi Pillai, put the following questions in regard to the condition of this industry.

(a) Has the attention of the Government been drawn to the rapidly declining condition of the tanning industry in the Presidency of Madras which was once in a very flourishing condition?

(b) Was the number of tanneries in the Presidency till recently upwards of 300, whereas the present number is only 100?

(c) Whether the existing tanneries are not in a struggling condition?

(d) Whether it is a fact that the United States of America are levying an import duty at rates ranging from 12 to 20 per cent. on all tanned skins, while admitting raw skins free of duty?

(e) Is it a fact that the exports of raw untanned skins during the past five years have risen in value from Rs. 4,49,42,970 to Rs. 5,57,66,378, while the exports of tanned skins fell in value from Rs. 4,49,41,863 in 1900-1901 to Rs. 2,26,40,461?

(f) Whether in the United States a new tanning process called the "Chrome" has been introduced, and whether the Government will cause enquiries to be made in view to the new method being introduced in this Presidency?

(g) Whether the Government will be pleased to take such other steps as may be called for to revive the tanning industry in Madras?

The Hon'ble Mr. FORBES replied:—

(a) The Government are aware that there has been a decline in the tanning industry in this presidency.

(b) The statistical returns of large industries supply the following figures:—

Year.	Number of tanneries working.
1898...	...122
1899...	...134
1900...	...172
1901...	... 15

(c) & (d) The Government have no information on this point.

(e) The figures quoted are substantially the same as those given on pages 49 and 53 of Vol. I of the annual statement of trade and navigation for the year ending the 31st March, 1902, published by the Government of India.

(f) & (g) The Government believe that some new tanning process is now used in America, but have no detailed information and are now enquiring into the subject.

INDIA—ITS INVESTMENTS AND INVESTORS.

Mr. George Cecil has something to say on the nature of investments in India and those who monopolise such investments, in the November number of the *Investor's Chronicle*. India is considered by him to be an excellent field for the broker and investor alike not only on account of its good and safe investments and desirable speculative chances but on account also of its possessing well-to-do men who are ready to put a commission in the broker's pocket. And for a white man an incentive to successful speculation is always present in Calcutta and Bombay as there is not much difficulty in obtaining admittance to that financial holy of holies—the inside ring. Mr. Cecil observes :

A Eurasian Subaltern in a staff corps infantry regiment has but to ask a horny-fisted cotton mill manager to dine at mess and become acquainted with anything worth knowing about the mill. Thus the amassing of wealth is not necessarily confined to Anglo-Indians who are in business.

In speculating in stocks various are the expedients adopted by the intending investors.

One of the favourite stocks in India is Jute Mill shares. Many people buy when advised by their broker that they will go no lower, selling them when it seems expedient. Others hold them till after the issue of the half-yearly report, hoping that the document in question will be of an exhilarating nature. Some (who have been sufficiently wise in their generation to give the senior partner of the Mill agents a good dinner) get the tip to buy and sell at the right moment.

Some precautions have to be taken also.

In speculating in coal stock it is as well to ascertain if the colliery manager possesses shares in the company or if he is desirous of acquiring them. For he is often quite capable of restricting the output by purchasing locally and adding the coal thus obtained to that emanating from his seam. It may be added that should the agent's own shares they will not be above adopting the tactics referred to.

There are others which are seldom in the market. Bank of Bengal shares are of that kind. Bengal Coal shares never go a begging. They have their own circle of admirers as it were or are owned by

the late proprietor and his friends. Brewery Companies are perhaps the safest in India. The writer gives the following reason.

For since various military officials hold shares therein, it is highly probable that the policy of insisting on the unfortunate troops drinking the much-disliked Indian beer will be continued. Consequently, their beer must always command a ready sale. Moreover, its cost of manufacture and transit charges are so small that however much the English brewers may reduce their prices the Anglo-Indian man of beer can undersell them and yet work at a remarkably handsome profit.

The pithy portion of the article is where the writer describes the holders of the various stocks.

A word as to the exiled speculators and investors. They are best described as 'all sorts and conditions of men.' Well-paid "Commissioners," "Collectors," and "Members of Council," who are blest with large credit balances, avail themselves of the information published in the Money Market portion of the daily papers, "Commissariat-Conductors" and officers employed in the Commissariat Department hasten to transmit to their broker those of their gains which are of an ill-gotten nature, instructing him to invest them in some particular stock. The "forest Officer," who has managed to hoodwink the Government by drawing more "travelling allowances" than he is entitled to, disposes of his spoil in like manner. The lady whose "Collector" husband is averse to accepting bribes makes use of the broker's services to invest the proceeds of the sale of the diamonds presented by the neighbouring "Rajah" who wishes to be recommended for some order or distinction. The "Station" Chaplain who wins a sweepstake on the "Viceroy's Cup" may also lay out the money in purchasing remunerative shares, and the half-caste Colonel of a Native Cavalry Corps will devote his winnings at the local race meeting to the same purpose. The District "Superintendent of Police" who receives a thousand rupees from the friends of a criminal to quash the case, will consult a broker as to how he can best dispose of the money, and the Superintendent of the Army Clothing Department, on being paid his salary and perquisites, will buy "Howrah Jutes" or "Amhuckie Teas." Amongst the other investors are the English clerks employed by Calcutta, Madras, Bombay and Cawnpore business houses, opulent white and black shopkeepers, merchants, proprietors of firms and others. To these may be added a few men who come out to Calcutta for the winter months, partly to avoid the horrors of an English winter, and partly because, having spent some twenty or thirty years in India they are quite unfitted for civilised surroundings.

THE GERMAN GOVERNMENT AND GERMAN TRADE.

Two reports recently sent out from the office of the United States Consul-General at Frankfurt set forth in some detail the efforts made by Germany, both by its diplomatic officials and its Consuls and commercial attaches, to promote trade with foreign countries. In the first it is narrated that the Minister of Commerce notified the various chambers of commerce throughout the Empire about the middle of 1901 that the German Legation in Morocco had asked the principal German firms in Tangier to prepare a collection of samples for the information of German manufacturers. It is explained that the Moorish demands for cottons had previously been supplied almost exclusively by England. The Minister was, therefore, convinced that it might be worth while for German manufacturers to try to compete with their English rivals. This collection of samples, when made, accompanied by a full explanatory report, was forwarded first to the Munich-Gladbach Chamber of Commerce for inspection by any manufacturers interested. Instructions were given that it was to remain upon exhibition there three weeks, after which it was forwarded to another chamber of commerce. Notice was given in each subsequent case in the newspapers that for a period of two weeks this collection of samples could be examined by interested persons residing within the district. The result was that a large number of representatives of different branches of the textile industry had an opportunity to make a careful inspection of the samples. Another experiment made by the German Government has been that of establishing a corps of commercial experts, whose members are detailed for duty at the consulates. Everything that has been gathered in a consular office as to trade methods is at once utilized by the expert, who, moreover, is not restricted in his movements by office duties. When his mission is completed, he returns to Germany for the purpose of meeting the interested exporters and giving them in detail individual instruction and information. This system is illustrated by a practical case. Dr. Quandt, the commercial expert attached to the consular office in Constantinople, undertook, during the year 1901 what is called an information journey through those German industrial districts interested in the export trade. Dr. Quandt was able to furnish much interesting information about the trade with Turkey, dealing especially with the reasons why it was difficult largely to increase Germany's trade relations, warning his hearers to be cautious in selling goods on credit, and recommending sources of information which might be deemed trustworthy.—

AID TO THE WEAVERS OF SALEM.

The following question was put by the Hon. Mr. Perrazu at the last meeting of the Madras Legislative Council.

(a) Is it a fact that in English factories a mechanical contrivance has recently been introduced and is now being used for the production of laced and embroidered cloths of the kind manufactured in Salem, and that these factory-made cloths are introduced into the Indian markets it would seriously affect the living of so many as 50,000 weavers of Salem and other places?

(b) If there is no definite information on the subject will the Government be pleased to enquire into the matter and take steps to open a school in Salem for teaching the weavers so that they may avail themselves of the machine aid as in English factories?

The Hon'ble Mr. Forbes replied:—

The Government are aware that a loom has been patented of the nature referred to and there are probably many such patents. The information that Government have on the subject raises no apprehension that Salem manufactures will suffer in competition with the English products. There is therefore no reason for opening a school of the nature suggested in Salem.

IMPORTATION OF ENAMELLED IRONWARE.

The Hon. Mr. Perrazu put the following question at the last meeting of the Madras Legislative Council.

(a) What is the value of enamelled ironware imported into Madras from Austria and Germany during the last three years?

(b) Having regard to the increasing demand for such articles of domestic use, will the Government be pleased to introduce the industry in Madras and open an institution to teach people here in the manufacture of such articles?

The Hon'ble Mr. Forbes replied:—

(a) The information desired is not available. Imports of enamelled ironware have heretofore been included under "Hardware, other sorts," but since October last under instructions from the Director-General of Statistics, they are being separately registered. The figures for the last months are:—

Value of imports from Austria	...	Rs. 12,546
Do from Germany	...	5,216

(b) The question of introducing the manufacture of enamelled ironware into Madras will be considered when the views of the Government of India on the proposals of the Industrial Schools Committee are received. The Government are not prepared at present to take any steps in the matter.

MINERAL DEVELOPMENT IN CENTRAL PROVINCES.

MR. TATA'S INTEREST IN THE MINERAL development of the Central Provinces is beginning to produce its effect on the minds of others. Recently Messrs. Burn and Company, of Jubbulpore, have taken out an exploring license for iron and lime over a great tract of country, and Mr. P. C. Dutt, a Jubbulpore Barrister, has taken prospecting and exploring licenses for copper and silver.

COTTON SEED OIL INDUSTRY.

The following interesting extract in reference to the cotton seed oil industry of the United States of America, taken from the *Sugar Planters' Journal* for August, 1902:—

In connection with the fertilizer industry it will be well for us to consider the cotton seed-oil industry.

An approximate estimate of the last cotton crop is 11,000,000 bales. Assuming that it requires 100 lb. of seed per bale, the total value of the crude seed, based on the value of \$300 for 100 lb. is \$33,000,000. This amount was paid to the farmer for a by-product that formerly had little or no value. There are now more than 400 cotton seed oil mills engaged in extracting and refining the oil of the seed. The value of the product (oil, meal, hulls and lint) turned out by these mills, based on the above crop estimate, is \$142,000,000. The products with their values, from one ton of cotton seed, or 2,000 lb. are as follows:—

Lint, 20 lb. at 3c. per lb.	\$.60
Hulls, 891 lb. at 50c. per 100lb.	\$ 4.45
Meal, 1,089 lb. which on being pressed yield (crude oil) 289 lb. or about 35 gallons at 30c. per gallon.	\$ 10.50
Oil cake, 800 lb. at \$1.00 per 100 lb.	\$ 8.50

Total.....\$ 23.05

The above quantities and prices are only approximate, but represent a fair average. Cotton seed at this writing is worth \$25.00 per ton. The 35 gallons oil on being chemically treated in the refinement increases about \$5.25 in value. It is necessary to add this to get the total value of the seed oil products in the estimate given above. This is a splendid illustration of the importance of the application of chemistry in the production of by-products. It is well to mention that the cotton seed oil industry have given up the cottonseed industry, the oleomargarine industry, the compound lard industry, a branch of the meat industry, and all the out-growth of

DECLINE OF SERICULTURE IN INDIA.

We take the following from the *Anglo-Indian Review*, a new magazine devoted specially to trade and industry.

We know that the Viceroy has at heart the revival of Indian industries, but we would mention as an object lesson what the Hungarian Government have done to revive the industry of sericulture and silk reeling.

This is India's tale:—The Director-General of Statistics classifies the silk industry as non-progressive; rightly so, for we see that, whereas in 1862 there were 122 silk filatures, in 1899 they had dwindled down in number to 65; in fact, in 1882 the total number of silk filatures in the North West Provinces, Oudh, Punjab, Madras and Bengal, amounted to 132, and in 1899 to 66!

Note the fostering foresight of the Hungarian Government. In 1880 they made a fresh start; they confided the task to a private person, accorded him full liberty of action, assured him of constant moral support, and placed at his disposal, free of interest, the necessary funds for accomplishing the object in view. Their first aim was to obtain perfect eggs (grains). The Institute of egg-supply and microscopic section of Szegzard was erected, and to-day possesses 160 microscopes and produces 1,027 kilos of grains. The stock is regenerated each year by the importation of 800 kilos of French and Italian grains, which after examination are used for breeding purposes. The attention is given to the control and instruction of the breeders during the harvest. In order to supervise the delicate operation of hatching out in each breeding commune is located a person who distributes the grains and educates the breeders. From 20 to 25 of these communes are under the charge of a district-inspector, 82 of whom are now grouped in eight sections. At the head of each section is a chief inspector with an assistant inspector who sees to the proper discharge of their duties.

From the time that the Government has taken this industry in hand it has distributed, during the last twenty years, 41,602 litres of mulberry seed, 41,073, 664 mulberry trees from two to three years old to be nursed in the agrarian schools or for hedging, and lastly 3,079,310 full-grown mulberry trees! By means of its officials the Government supervises 5,363 communal agrarian schools, who are obliged to set apart two-thirds of their land to the cultivation of the mulberry. It further maintains at its own expense 145 special schools for growing mulberry trees; the saplings are distributed gratuitously among the poor communes, where they are planted on waste ground. They are also planted along the Government and other high roads. A law enacts that in all communes suitable for sericulture, all unutilized land, and especially all roads, shall be planted with mulberry trees.

Outside the Government no one in Hungary has the right to sell or distribute silk worm eggs. On the other hand the Government undertakes to pay cash for all the cocoons produced in the country. To facilitate this business 149 stations have been established where the cocoons are purchased. Government agents receive the amount paid by the growers on simple presentation of the receipt. At the end of the process the Government pays the growers fully the amount which is due to them for the cocoons received.

